Commencement 2012

THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

Sunday, December Sixteenth

TWO THOUSAND TWELVE

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MESSAGE *from the* CHANCELLOR

Dear Graduates and Families:

The University of North Carolina is the oldest public institution of higher education in the country. It embodies the hopes for a democratic nation and the promise that education could make that democracy and the world better for future generations. We still believe in that promise at Carolina, and that is why we celebrate your graduation today.

The world has changed a lot since you entered UNC, and it needs you. Thanks to your Carolina education, you are ready for it. You have learned how to propose new ideas and have gained a worldview to understand their implications. You know the importance of extending opportunities to everyone.

On behalf of our faculty and staff, thank you to all the family members and friends who helped you through your educational journey. We know that you could not have done it without their love and support.

Welcome to the ranks of Tar Heel alumni who have gone out into the world and made a difference. We know you will, too. Carolina and Chapel Hill will be here for you. No matter where you go, you can count on our love and support. We can't wait to hear from you.

Hark the Sound!

H. Holden Thorp

HOLDEN THORP

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ALMA MATER

The words of "Hark the Sound," UNC–Chapel Hill's alma mater, were written in 1897 by William Starr Myers, a graduating senior. The Glee Club director asked Myers to put words to the tune "Amici," and the song was first performed on June 2, 1897, as part of the Glee Club's Commencement performance in Gerrard Hall.

Soon the song was almost forgotten. When a University quartet tried a few years later to remember the words, they could recollect only the first verse and the chorus of Myers' original version. Two members of the quartet, Charles S. Mangum and Charles T. Woollen, added two verses to the one they remembered. Mangum later became a professor in the School of Medicine, and Woollen worked as the University's business manager and comptroller.

HARK THE SOUND

Hark, the sound of Tar Heel voices
Ringing clear and true,
Singing Carolina's praises,
Shouting N.C.U.!

Hail to the brightest star of all!
Clear its radiance shine!
Carolina, priceless gem,
Receive all praises thine.

For Your Information

If you have any questions regarding Commencement activities, or in the event of an emergency, please contact an usher.

Open captioning of the ceremony will be available on the video screens in the Dean Smith Center.

This Commencement program is printed prior to administering final examinations. Therefore, including degree candidates' names in this program does not represent certification that candidates have satisfactorily completed degree requirements.

All diplomas are printed after graduation and are mailed to graduates. Every effort has been made to ensure the accuracy of this program's content. Any omissions or errors are unintentional.

The COMMENCEMENT PROGRAM

Concert by the University Band	Jeffrey W. Fuchs, *Director*
Academic Procession	The Faculty Marshal Valerie Ashby, *Gordon and Bowman Gray Distinguished Term Professor, Department of Chemistry* Brennan Fox, *The Chief Student Marshal*
	The Official Party
	The Faculty
	The Candidates for the Degrees of Doctor of Philosophy, Doctor of Education and Doctor of Public Health
	The Candidates for Master's and Professional Degrees
	The Candidates for Baccalaureate Degrees SENIOR CLASS MARSHALS WILL LEAD THE GROUPS TO THEIR SEATS.
Presiding	Holden Thorp, *Chancellor of the University of North Carolina at Chapel Hill*
National Anthem	Sarah Catherine Humphrey WITH THE ENTIRE ASSEMBLAGE
Recognition of Platform Party	Holden Thorp
Welcome Remarks	FOR THE UNIVERSITY OF NORTH CAROLINA William G. Daughtridge Jr., *UNC Board of Governors*
	FOR THE BOARD OF TRUSTEES OF THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL Wade Hampton Hargrove, *Chair*
	FOR THE GENERAL ALUMNI ASSOCIATION Eric Montross, *Chair, Board of Directors*
Introduction of Commencement Speaker	Tim Palmer, *President of the Class of 2013*
Commencement Address	Myron S. Cohen, *J. Herbert Bate Distinguished Professor of Medicine, Microbiology and Immunology and Public Health; Associate Vice Chancellor for Global Health; Director of the Institute for Global Health and Infectious Diseases*
Recognition of Doctoral Candidates	Leslie S. Lerea, *Associate Dean, Student Affairs, The Graduate School*
Introduction of Deans, Conferring of Degrees, and Chancellor's Charge to the Graduates	Holden Thorp
Ceremonial Recognition of the Graduates	Nora Chan, *Vice President of the Class of 2013*
"HARK THE SOUND"	Sarah Catherine Humphrey
Academic Recessional	*Please remain in place for the recessional of the Official Party, Faculty and Candidates for Degrees – led by the Faculty Marshal and the Senior Class Marshals.*

HOLDEN THORP

Chancellor

Holden Thorp took office as Carolina's 10th chancellor on July 1, 2008. He has invested three decades of his life at the University, starting as an undergraduate student who earned a bachelor of science degree with honors in 1986. Through his research, Thorp developed technology for electronic DNA chips and founded spin-off companies. He raised money for a science complex that has helped boost faculty research productivity, served as director of the Morehead Planetarium and Science Center, and was dean of the College of Arts and Sciences.

Thorp announced in September 2012 that he planned to step down, effective June 30, 2013. A Kenan Professor, he will resume his research and teaching in the chemistry department.

A North Carolina native, Thorp grew up in a Fayetteville family steeped in UNC traditions dating to the 1800s. When he graduated from Terry Sanford High School, the only college on his application list was Carolina. Attending a world-class research university — where the same people conduct research and teach — allowed Thorp to work in chemistry labs with top faculty and inspired him to become a professor. He pursued that dream at the California Institute of Technology, where he earned a doctorate in chemistry in 1989, and at Yale University for postgraduate work.

As chancellor, Thorp has been driven to ensure that UNC students today have the same life-changing opportunities that he did. He has pushed relentlessly to create an atmosphere in which students could be inspired to tackle the world's great problems. He launched "Innovate@Carolina: Important Ideas for a Better World," a roadmap for innovation in science, business, medicine, nonprofits and academia. The chancellor has pushed the campus to leverage scientific and medical research for society's good, and to advance work in the humanities that leads to greater understanding of the challenges the world faces.

Thorp serves on the National Advisory Council on Innovation and Entrepreneurship, which held its first national forum on campus in 2011. He co-authored "Engines of Innovation — The Entrepreneurial University in the 21st Century," a UNC Press book that makes the case for the pivotal role of research universities as agents of societal change. Royalties support innovation at UNC.

Thorp's priorities include protecting Carolina's legendary commitment to providing a high-quality education at an affordable price—core values that have kept the University and the chancellor in the spotlight as leaders during a national debate about the future of U.S. higher education. He was among a dozen higher education leaders invited to the White House to discuss with the president how campuses can become more affordable while producing more graduates. Thorp also serves on the national Commission on Higher Education Attainment, which is charting a course for improving college retention and attainment and, in turn, restoring the nation's higher education preeminence.

The University's recent successes under Thorp's leadership include enrolling a 2012 first-year class of nearly 4,000 outstanding students drawn from a record 29,000 applicants, up 24 percent over last year. Faculty research brought in $767 million during fiscal 2012 despite a challenging federal budget picture. The University rose to ninth from 16th among all research universities for federal funding ($545.99 million) devoted to research and development in fiscal 2010. That was the first time UNC-Chapel Hill had cracked the top 10. Alumni and friends stepped up their private giving in fiscal 2012 for the University's second best fundraising year ever, with $287 million in gifts — up 4 percent — at a time when the economy was still struggling. New commitments jumped by 8 percent to $331.4 million, and the number of donors rose to 78,000, 1,000 more than in 2011.

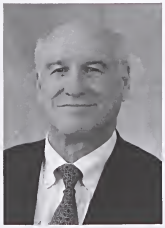
During Thorp's tenure, the University has successfully managed state budget cuts exceeding $238 million. A privately funded Bain & Company study has made operations more efficient and saved nearly $50 million annually in permanent state dollars. UNC-Chapel Hill also increased its percentage of successful faculty retentions to pre-2008 economic downturn levels as part of a proactive, aggressive strategy to keep Carolina's very best faculty in Chapel Hill.

Thorp's research expertise includes the electronic properties of DNA and RNA, and he co-founded Viamet Pharmaceuticals, which is developing drugs for prostate cancer and fungal infections.

An accomplished musician who plays jazz bass and keyboard, Thorp is married to Patti Worden Thorp, a Hope Mills native and UNC Greensboro graduate. Their children are John and Emma.

MYRON S. COHEN

The Commencement Speaker



Myron S. Cohen, the J. Herbert Bate Distinguished Professor of Medicine, Microbiology and Immunology and Public Health at UNC-Chapel Hill, is an acclaimed physician and researcher who has spent the last three decades studying the transmission and prevention of transmission of HIV/AIDS.

Cohen joined the UNC faculty in 1980 – the same year that AIDS was first identified – and was one of the first to recognize that any attempt to stem the AIDS epidemic would require an international program targeting improved care, treatment and research in resource-poor countries such as Malawi, China, the Democratic Republic of Congo, South Africa and Russia, as well as the United States.

Cohen's team of researchers at Carolina provided the scientific foundation for the Center for Disease Control's 2005 strategic plan for HIV prevention and led the National Institutes of Health to tap Carolina to help develop a safe and effective vaccine against HIV/AIDS.

As the architect and principal investigator of the multinational National Institutes of Health HIV Prevention Trials Network, Cohen was instrumental in showing that antiretroviral treatment prevents the sexual transmission of HIV-1. This work was recognized by Science Magazine as the "Breakthrough of the Year" in 2011.

In 2012, he was elected to the Institute of Medicine, one of the nation's highest honors for those in the fields of health and medicine.

Cohen has been a University faculty member for more than 30 years. His titles include associate vice chancellor for global health and director of the Institute for Global Health and Infectious Diseases. He earned his undergraduate degree from the University of Illinois, Urbana-Champaign, and his M.D. degree from Rush Medical College in Chicago.

Officers of the Class of 2012

Dean Drescher, *President*
Mohammad Saad, *Vice President*
Tori Stilwell, *Chief Marshal*
C. Hawkins '00, *Advisor*
Bianca Bell '11, *Annual Fund Liaison*

Officers of the Class of 2013

Tim Palmer, *President*
Nora Chan, *Vice President*
Brennan Fox, *Chief Marshal*
C. Hawkins '00, *Advisor*
Bianca Bell '11, *Annual Fund Liaison*

Marshals of the Class of 2012

Omar AbdelBaky
Carly Buch
Tricia Chesson
Jee Su Choi
Donald Cooley
Ben Cottingham
Martha Cox
Ryan Davis
Carley Dixon
Carly Elliott
Emily Farnell
Christina Foust
Megan Gyoerkoe
Taylor Haskin
Roxanne Hernandez
Taylor Howard
Ken Jameson
Rashi Kabra
Andres Lazarus
Coty Lee
Chris Lyle
Chad Manhertz
Atahar Mannan
Carter McCall
Noah Menaker
Addie Moody
Anna Mullen
Kene Onourah
Jaymee Patel
Burton Peebles
Holly Roberts
Diana Roycroft
Joel Semakula
Troy Smith
Will Taylor
Katie Terry
Stephanie Vaughn
Jeffrey Veale Jr.

Marshals of the Class of 2013

Kelly Blessing
Jerry Bowens
Sara Brady
Derek Buchanan
Lindsay Casper
Josh Clinard
Emily Ellis
Cheyenne English
Ashley Fox
Jordan Graves
Jane Hall
Abby Harrill
Janae Hinson
Colin Hodges
Mike Hourigan III
Laura Kessler
Sarah Mafe
Logan Mauney
Denzel McCollum
Maddy Merrill
Khadija Mohamed
Symone Morales
Thomas Mosley
Antoinette Newsome
Moni Oyedepo
Amber Pace
Nish Patel
Swatí Rayasam
Ray Sawyer
Simon Scholl
Lauren Seiple
Kara Simpson
Kathryn Singsank
Justin Sodoma
Kimmy Summers
Emily Tracy
Becca Vinson
Jeff White

Graduate and Professional Student Federation Officers

Michael Bertucci, *President*
Julie Lauffenburger, *Vice President of Internal Affairs*
Kiran Bhardwaj, *Vice President of External Affairs*
Nicole Zane, *Chief of Staff*
JoEllen McBride, *Treasurer*
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CAROLINA ANNUAL FUND *and* 2012 SENIOR CAMPAIGN

Congratulations, graduates! There is no doubt that your experience at Carolina has included unparalleled opportunities and that your degree will open many doors for you in the future.

As Carolina students, you have been touched every day by private gifts to Carolina that maintain and enhance the University's tradition of excellence. Annual gifts improve the lives of students, faculty and staff. From scholarships to new research buildings and equipment, to access to incredible performances at Memorial Hall, to more than 6 million volumes in the libraries across campus, private gifts have impacted every aspect of campus life.

You're invited to support UNC-Chapel Hill through the Senior Campaign. You can make a gift to any part of the University that is meaningful to you — your major, a professorship, a student organization, scholarships and student aid, or campuswide programs. Or, to make an immediate difference where it is needed the most, consider supporting the Chancellor's Unrestricted Fund.

All gifts are included in the Senior Campaign and Annual Fund. Thank you to those who have already made your gift. **Give online at annualfund.unc.edu/gift or by mail to P.O. Box 309, Chapel Hill, N.C. 27514-0309.** For more information about the 2012 Senior Campaign, visit annualfund.unc.edu/students.

WELCOME YOUNG ALUMNI!

As you transition from students to alumni, we encourage you to keep up with young alumni events and Carolina news through the Carolina Annual Fund young alumni Facebook page (facebook.com/UNCYoungAlumni) and Twitter page (@UNCYoungAlumni). Through our social media efforts you can connect with fellow recent Carolina graduates in your area, participate in local events and social activities, and help Carolina stay strong by advocating philanthropy and support for the University among your peers. For more information about young alumni programs, visit youngalumni.unc.edu.

DEGREES *and* CERTIFICATES

The following is a list of all degrees and certificates available to students at the University of North Carolina at Chapel Hill

UNDERGRADUATE CERTIFICATES

Certificate in Community Preparedness and Disaster Management
Certificate in Cytotechnology
Certificate in Dental Hygiene
Certificate in Radiography
Certificate in Sports Communication

UNDERGRADUATE DEGREES

Bachelor of Arts with a major in:
African and Afro-American Studies; American Studies; Anthropology; Archaeology; Art History; Asian Studies; Biology; Chemistry; Classics; Communication Studies; Comparative Literature; Computer Science; Contemporary European Studies; Dramatic Art; Economics; English; Environmental Studies; Exercise and Sport Science; Geography; Geological Sciences; German; Germanic and Slavic Languages and Literatures; Global Studies; History; Interdisciplinary Studies; Latin American Studies; Linguistics; Management and Society; Mathematics; Music; Peace, War and Defense; Philosophy; Physics; Political Science; Psychology; Public Policy; Religious Studies; Romance Languages; Sociology; Studio Art; Women's and Gender Studies
Bachelor of Arts in Business Journalism
Bachelor of Arts in Education with a major in:
Child Development and Family Studies; Elementary Education; Middle Grades Education
Bachelor of Arts in Journalism and Mass Communication
Bachelor of Fine Arts
Bachelor of Music
Bachelor of Science with a major in:
Applied Science; Biology; Chemistry; Computer Science; Environmental Sciences; Geological Sciences; Human Biology; Mathematical Decision Sciences; Mathematics; Physics; Psychology
Bachelor of Science in Business Administration
Bachelor of Science in Clinical Laboratory Science
Bachelor of Science in Dental Hygiene
Bachelor of Science in Information Science
Bachelor of Science in Nursing
Bachelor of Science in Pharmaceutical Sciences
Bachelor of Science in Public Health with a major in:
Biostatistics; Environmental Health Sciences; Health Policy and Management; Nutrition
Bachelor of Science in Radiologic Science

POSTBACCALAUREATE AND POST-MASTER'S CERTIFICATES

Postbaccalaureate Certificate in Auditory Learning in Young Children
Postbaccalaureate Certificate in Business Journalism
Postbaccalaureate Certificate in Core Public Health Concepts
Postbaccalaureate Certificate in Field Epidemiology
Postbaccalaureate Certificate in Global Health
Postbaccalaureate Certificate in Maternal and Child Health Leadership
Postbaccalaureate Certificate in Occupational Health Nursing Specialty
Postbaccalaureate Certificate in Radiologist Assistant
Postbaccalaureate Certificate in Technology and Communication
Post-Master's Certificate in Information and Library Science
Post-Master's Certificate in Public Health Leadership

GRADUATE DEGREES

Master of Accounting
Master of Arts in the discipline of:
American Studies; Anthropology; Art History; Biology; Chemistry; Classics; Communication Studies; Comparative Literature; Ecology; Education; English; Exercise and Sport Science; Folklore; Geography; Geological Sciences; Germanic Languages; German Studies; History; Linguistics; Mass Communication; Mathematics; Musicology; Philosophy; Political Science; Psychology; Public Policy; Religious Studies; Romance Languages and Literatures; Russian and East European Studies; School Psychology; Slavic Languages and Literatures; Sociology
Master of Arts in Teaching
Master of Arts in Technology and Communication
Master of Business Administration
Master of Clinical Laboratory Science
Master of City and Regional Planning
Master of Education in the discipline of:
Education; School Counseling; School Psychology
Master of Fine Arts in the discipline of:
Dramatic Art; Studio Art
Master of Healthcare Administration
Master of Laws
Master of Physical Therapy
Master of Public Administration
Master of Public Health in the discipline of:
Biostatistics; Environmental Sciences and Engineering; Epidemiology; Health Behavior and Health Education; Health Policy and Management; Maternal and Child Health; Nutrition; Public Health Leadership
Master of Radiologic Science
Master of School Administration
Master of Science in the discipline of:
Biochemistry and Biophysics; Biology; Biomedical Engineering; Biostatistics; Cell and Developmental Biology; Cell and Molecular Physiology; Chemistry; Computer Science; Dental Hygiene Education; Ecology; Economics; Endodontics; Environmental Sciences and Engineering; Genetics and Molecular Biology;

Geological Sciences; Human Movement Science; Marine Sciences; Materials Science; Mathematics; Microbiology and Immunology; Neurobiology; Nutrition; Occupational Therapy; Operative Dentistry; Oral and Maxillofacial Pathology; Oral and Maxillofacial Radiology; Oral and Maxillofacial Surgery; Oral Biology; Orthodontics; Pathology; Pediatric Dentistry; Periodontology; Pharmaceutical Sciences; Pharmacology; Physics; Prosthodontics; Public Health Nursing; Rehabilitation Counseling and Psychology; Speech and Hearing Sciences; Statistics and Operations Research; Toxicology

Master of Science in Clinical Research

Master of Science in Disaster Management

Master of Science in Environmental Engineering

Master of Science in Information Science

Master of Science in Library Science

Master of Science in Management

Master of Science in Nursing

Master of Science in Public Health in the discipline of: Biostatistics; Environmental Sciences and Engineering; Epidemiology; Health Behavior and Health Education; Health Policy and Management; Maternal and Child Health

Master of Science in Recreation Administration

Master of Social Work

Doctor of Philosophy in the discipline of: American Studies; Anthropology; Art History; Biochemistry and Biophysics; Bioinformatics and Computational Biology; Biology; Biomedical Engineering; Biostatistics; Business Administration; Cell and Developmental Biology; Cell and Molecular Physiology; Chemistry; City and Regional Planning; Classics; Communication Studies; Comparative Literature; Computer Science; Ecology; Economics; Education; English; Environmental Sciences and Engineering; Epidemiology; Genetics and Molecular Biology; Geography; Geological Sciences; Germanic Languages; German Studies; Health Behavior and Health Education; Health Policy and Management; History; Human Movement Science; Information and Library Science; Marine Sciences; Mass Communication; Materials Science; Maternal and Child Health; Mathematics; Microbiology and Immunology; Musicology; Neurobiology; Nursing; Nutrition; Occupational Science; Oral Biology; Pathology; Pharmaceutical Sciences; Pharmacology; Philosophy; Physics; Political Science; Psychology; Public Policy; Religious Studies; Romance Languages and Literatures; School Psychology; Social Work; Sociology; Speech and Hearing Sciences; Statistics and Operations Research; Toxicology

Doctor of Public Health in the discipline of: Biostatistics; Health Behavior and Health Education; Health Policy and Management; Maternal and Child Health; Nutrition

PROFESSIONAL DEGREES

Doctor of Audiology

Doctor of Dental Surgery

Doctor of Education in the discipline of: Curriculum and Instruction; Educational Leadership

Doctor of Medicine

Doctor of Pharmacy

Doctor of Physical Therapy

Juris Doctor

THE BELL TOWER

The Morehead-Patterson Memorial Bell Tower was given to the University in 1931 by John Motley Morehead III and Rufus Lenoir Patterson. Its 14-bell carillon rings both manually and electronically to call students to class, provide twilight music and serenade the dispersing crowd after football games. Rising 172 feet, the tower is surrounded by a hedge and lawn designed by William C. Coker, botany professor and creator of the campus Arboretum.

CANDIDATES *for* GRADUATE DEGREES

December 2012 | *Degree candidates' names are followed by their area of major study, dissertation or project title and the name of their doctoral advisor.*

The Graduate School

ESTABLISHED 1903
Dean Steven W. Matson

DOCTOR OF PHILOSOPHY

Laurie Ann Abler, *Health Behavior and Health Education,* Developing a Measure of Hope for Exploring HIV-Related Risks among Young South African Women in a High Prevalence Setting. Professor Suzanne Maman.

Delia Nichole Acevedo, *Political Science,* Using the Five Factor Model of Personality Structure to Identify the Antecedents of Political Ambivalence. Professor Pamela J. Conover.

Cynthia Thornton Bacon, *Nursing,* Exploring Organizational Influences on Patient Symptom Management in Hospitals. Professor Barbara A. Mark.

Brenda C. Baletti, *Geography,* From Land to Territory: New Geographies of Amazonian Struggle. Professor Wendy Wolford.

Kevin Richard Blauth, *Neurobiology,* Fractalkine Induces the Expression of Intercellular Adhesion Molecule-1 on CD4+ T-Lymphocytes: Implications for the Immunopathogenesis of Multiple Sclerosis. Professor Silva Markovic-Plese.

Emily Wenink Bratton, *Epidemiology,* Clinical Management and Outcomes of Patients in the Duke Cryptococcosis Clinical Cohort, 1996–2009. Professor Charles Poole.

Sarah Mae Brosnan, *Chemistry,* The Development of Novel Polyesters as Unique Biomaterials. Professors Valerie S. Ashby and Joseph M. DeSimone.

Jarrett Grayson Camp, *Genetics and Molecular Biology,* The Impact of the Microbiota on Transcriptional Regulation in the Vertebrate Intestine. Professor John F. Rawls.

Alex Perrow Carll, *Environmental Sciences and Engineering,* The Influence of Autonomic Imbalance on Diesel Exhaust-Induced Cardiac Dysfunction in Heart Failure-Prone Rats. Professors Aimen K. Farraj and Avram Gold.

Alexis Wells Carpenter, *Chemistry,* Synthesis of Hybrid Inorganic/Organic Nitric Oxide-Releasing Silica Nanoparticles for Biomedical Applications. Professor Mark H. Schoenfisch.

Isaac Saibun Chan, *Genetics and Molecular Biology,* Hedgehog Signaling in Hepatocellular Carcinoma. Professors Anna Mae Diehl and Albert Baldwin.

Yu-Chi Chen, *Genetics and Molecular Biology,* Drosophila Neuroligin 2 Coordinates Pre- and Post-Synaptic Development, Differentiation and Neurotransmission. Professors Manzoor A. Bhat and Stephen T. Crews.

Zaozao Chen, *Cell and Developmental Biology,* Inhibition of Abl Family Kinases Produces a Profound Change in Cell Shape and Migration. Professor Ken Jacobson.

Catheryne Grayce Clouse, *Epidemiology,* Patient Retention at Key Milestones after HIV Diagnosis at a Primary Healthcare Clinic Offering Early Antiretroviral Therapy Initiation in Johannesburg, South Africa. Professor Audrey E. Pettifor.

Kimberly A. Coggan, *Microbiology and Immunology,* Characterization of a Type IV Pilus Biogenesis Operon in Pseudomonas Aeruginosa. Professor Matthew C. Wolfgang.

Siobhan Eileen Colgan, *Education,* The Role of Maternal Depression in Accessing Early Intervention Services for Children with Developmental Delay. Professors Julie L. Daniels and Rune J. Simeonsson.

Christopher John Currie, *Art History,* Art, Illusion and Social Mobility in 18th-Century France: Hyacinthe Rigaud and the Making of the Marquis de Gueidan. Professor Mary D. Sheriff.

Kelly Kent Davis, *Journalism and Mass Communication,* Public Faces: A Content Analysis of Gender, Ethnic and Racial Diversity on PBS. Professor Debashis Aikat.

Claire de la Varre, *Education,* An Exploration of Student and Teacher Social Presence in Asynchronous Discussion in an Online Advanced Placement Course for Rural High School Students. Professor Jill V. Hamm.

Chao Deng, *Statistics and Operations Research,* Optimal Design and Control of Finite-Population Queueing Systems. Professors Nilay Tanik Argon and Vidyadhar G. Kulkarni.

Vanessa Carolyn DeRocco, *Chemistry,* Biochemical and Single-Molecule Fluorescence Characterization of MUTS and MUTS Homolog Protein-DNA Interactions. Professor Dorothy A. Erie.

Crystal Heath Dodson, *Nursing,* Diffusion of Innovation: Knowledge and Attitudes of Oncology Nurses Regarding Pharmacogenomic Testing. Professor Marcia Van Riper.

Janet Michelle Doolittle, *Bioinformatics and Computational Biology,* Prediction of Host-Virus Interaction Networks. Professor Shawn Gomez.

Stuart Scott Dunn, *Chemistry,* Shape-Specific Hydrogel Nanoparticles with Defined Composition and Surface Properties for Gene Silencing. Professor Joseph M. DeSimone.

Jeffrey D. Edwards, *Social Work,* Juvenile Psychopathy and Traumatic Events among Incarcerated Adolescents. Professor Matthew O. Howard.

Jon K. Edwards, *Biomedical Engineering,* Robotic Endoscope. Professor Robert Q. Dennis.

Carolyn Martindale Edy, *Journalism and Mass Communication,* Conditions of Acceptance: The United States Military, The Press and the "Woman War Correspondent," 1846–1945. Professor Jean Folkerts.

Murat Es, *Geography,* Turkish-Dutch Mosques and the Construction of Transnational Spaces in Europe. Professor Banu Gokariksel.

Elizabeth Serex Evans, *Human Movement Science,* The Impact of Acute Aerobic Exercise on Natural Killer Cell, Catecholamine and Cortisol Responses in Breast Cancer Survivors. Professor Claudio L. Battaglini.

Alessandra Lynn Ferzoco, *Chemistry,* Understanding MS Approaches to Peptide Characterization. Professor Gary L. Glish.

Gina Kim Flakes, *Political Science,* Integration and Exchange Rate Theory: Empirically Evaluating the Predictability of Individual Preferences. Professor Thomas H. Oatley.

Kathleen Foody, *Religious Studies,* Thinking Islam: Islamic Scholars, Tradition and the State in the Islamic Republic of Iran. Professor Omid Safi.

Edward Gordon Franklin, *Chemistry,* Utilization of Long Columns Packed with Sub-2 um Particles Operated at High Pressures and Elevated Temperatures for High-Efficiency One-Dimensional Liquid Chromatographic Separations. Professor James W. Jorgenson.

Philip Charles Gach, *Chemistry,* Capturing, Analyzing and Collecting Adherent Cells Using Microarray Technologies. Professors Nancy L. Allbritton and Royce W. Murray.

Melita Marie Garza, *Journalism and Mass Communication,* They Came to Toil: News Frames of Wanted and Unwanted Mexicans in the Great Depression. Professor Barbara Friedman.

Deepak Gopalakrishna, *Genetics and Molecular Biology,* DiGeorge Syndrome Phenotypes Reflect Disrupted Interaction between Inductive Signals and 22q11 Genes. Professor Anthony Lamantia.

Melanie Louise Bain Gratton, *Statistics and Operations Research,* Algorithms for Trust-Region Subproblems with Linear Inequality Constraints. Professor Jon W. Tolle.

William Burton Grider, *Economics,* Gateway Theory in a Dynamic Context: The Effect of Past Substance Use on Current Demand. Professor Donna Gilleskie.

Jeanne Gunther, *Education,* Illuminating Teacher Change in the Context of a Technologically Mediated Professional Development Program and Early Reading Intervention: A Case Study. Professors Lynne Vernon-Feagans and Marnie Ginsberg.

Tracy Hadden-Loh, *City and Regional Planning,* Understanding Urban Development and Water Quality through Scenarios. Professor Yan Song.

Jeffrey J. Harden, *Political Science,* Multidimensional Democracy: The Supply and Demand of Political Representation. Professor Thomas M. Carsey.

Nathan Jay Harris, *Biology,* The Role of Rap1 in Drosophila Morphogenesis. Professor Mark Peifer.

Susan Wallace Haws, *Health Behavior and Health Education,* A Multilevel Study of Schools' Influences on Adolescent Substance Use. Professor Susan T. Ennett.

Abby Hoffman, *Education,* Teacher Attunement: Supporting Students' Peer Experiences in Early Elementary Classrooms. Professor Jill V. Hamm.

John R. Houser, *Physics and Astronomy,* A Systems Level Analysis of Transcriptional Regulation in the Yeast Mating Response. Professors Richard Superfine and Timothy Elston.

Rolien Hoyng, *Communication Studies,* Istanbul of Networks: Space, Technology and Governance. Professor Lawrence Grossberg.

Chia-Wen Hsu, *Pharmaceutical Sciences,* Development of Multiplexable Biosensors to Quantify Spatiotemporal Dynamics of Multiple Rho GTPases and Protein Kinases in the Same Living Cell. Professor Klaus M. Hahn.

Jing Hu, *Environmental Sciences and Engineering,* Effects of Bioremediation on Bioavailability and Genotoxicity of Contaminants in PAH-Contaminated Soil. Professor Michael D. Aitken.

Joel Wayne Hudley, *Geological Sciences,* Reconstructing Modern and Pliocene (c. 5.4–2.4 Ma) Decadal Climate Variations in the Paleoenvironments of the Middle Atlantic Bight Using Isotope and Increment Sclerochronology. Professor Donna M. Surge.

Laili Irani, *Maternal and Child Health,* Family Planning in Urban Kenya: An Examination of the Factors Affecting Contraceptive Use. Professor Ilene S. Speizer.

Robert Brandon Irvin, *Psychology,* Emotional and Contextual Influences in an Altruistic Decision-Making Task. Professor Joseph Lowman.

Cassandra Baheeya Jabara, *Biology,* Using Deep Sequencing with a Primer ID to Resolve the Structure of Viral Populations and Reveal Pre-Existing Drug Resistance Mutations in the HIV and HCV Protease Genes. Professors Corbin D. Jones and Ronald Swanstrom.

Karen Elizabeth Jakub, *Nursing,* Long-Term Adjustment and Reimplantation Surgery in Patients with Implantable Cardioverter Defibrillators. Professor Margarete Sandelowski.

Shannon Zenia Jones, *Toxicology,* The Identification of Novel Mechanisms to Regulate B Cell Responses during Adaptive Immunity. Professor Barbara J. Vilen.

Ja Hyun Kang, *Nursing,* Prevention of Healthcare-Associated Infections in U.S. Hospital Settings. Professor Barbara Mark.

Dio Kavalieratos, *Health Policy and Management,* Exploring the Role of Palliative Care in Heart Failure: Referral Barriers, Care Gaps, and Quality of Care. Professor Morris Weinberger.

Yeuseung Kim, *Journalism and Mass Communication,* Effects of Source of Customized Recommendations, Type of Product, and Amount of Choice on Consumers' Attitudes. Professor Sriram Kalyanaraman.

Yuri Kim, *Geography,* Water Balance Change Under Climate and Landuse/Landcover Variability in the North Carolina Piedmont. Professor Lawrence E. Band.

Carlye Yates Kincaid, *Psychology,* Risk and Resilience among Single Mother Families: A Closer Look at Parenting and Adolescent Outcomes. Professor Deborah J. Jones.

Jessica Klusek, *Speech and Hearing Sciences,* Pragmatic Language in Autism and Fragile X Syndrome: Links with Physiological Arousal and Anxiety. Professor Molly Losh.

Bethany Ellen Kok, *Psychology,* Testing a Socio-Autonomic Spiral Model of Social Connection. Professor Barbara L. Fredrickson.

Huai-Ping Lee, *Computer Science,* Simulation-Based Joint Estimation of Body Deformation and Elasticity Parameters for Medical Image Analysis. Professor Ming C. Lin.

Kim Maureen Lichtveld, *Environmental Sciences and Engineering,* Using in Vitro Cultured Lung Cell Exposure Systems to Compare the Toxicity of Fresh and Aged Diesel Exhaust Utilizing an Outdoor Smog Chamber. Professors Harvey Jeffries and Kenneth G. Sexton.

Yang Liu, *Pharmaceutical Sciences,* Pharmacokinetics and Biodistribution of LCP Nanoparticles. Professor Leaf Huang.

Dustin Marsh Long, *Biostatistics,* Causal Inference and Principal Stratification: Competing Risks, Bounds and Surrogates. Professor Michael G. Hudgens.

Justin Thomas Low, *Biochemistry and Biophysics,* Structural and Therapeutic Insights from the HIV-1 RNA Genome. Professor Kevin M. Weeks.

Jianzhe Luo, *Statistics and Operations Research,* Queueing Approaches to Appointment System Design. Professors Vidyadhar G. Kulkarni and Serhan Ziya.

Lindsey Ward Lyles, *City and Regional Planning,* Stakeholder Network Influences on Local-Level Hazard Mitigation Planning Outputs. Professor Philip R. Berke.

Jennifer Marie Lynn, *History,* Contested Femininities: Representations of Modern Women in the German Illustrated Press, 1020–1045. Professor Karen Hagemann.

Bonnie Anne Lyon, *Environmental Sciences and Engineering,* Impact of UV Treatment on Disinfection Byproduct Precursors and Subsequent Byproduct Formation from Chlorine and Chloramine. Professor Howard S. Weinberg.

Laura Haak Marcial, *Information and Library Science,* Moving beyond the Desktop: Searching for Information with Limited Display Size. Professor Bradley M. Hemminger.

Helen Camp Matthews, *Romance Languages,* Sugar Turns to Cotton: French Retellings of the Haitian Revolutions and the American Civil War. Professor Dominique Fisher.

Margaret Elizabeth McCormick, *Cell and Molecular Physiology,* The Adhesion Molecule PECAM-1 Directs Endothelial Nitric Oxide Synthase Activity and Cardiac Function to Regulate Cardiovascular Homeostasis. Professor Carol Otey.

Robert McKeever, *Journalism and Mass Communication,* Vicarious Experience: The Effects of Message-Induced Empathy on Attitudes toward Individuals with Severe Depression. Professor Daniel Riffe.

Jessica Tsesha Meed, *Health Policy and Management,* Home Front — Exploring Associations between Household Structure, Coping Strategies and Behavioral Health Visits within the Military. Professor James V. Porto.

Lucia Ingrid Mendez, *Speech and Hearing Sciences,* A Culturally and Linguistically Responsive Vocabulary Approach for Young Latino Dual Language Learners. Professors Elizabeth Crais and Dina C. Castro.

Alicia Ann Midland, *Bioinformatics and Computational Biology,* Characterization of the Breast Cancer Kinome. Professors Shawn M. Gomez and Gary L. Johnson.

Stephen Milder, *History,* "Today the Fish, Tomorrow Us": Anti-Nuclear Activism in the Rhine Valley and Beyond, 1970–1979. Professor Konrad H. Jarausch.

David L. Millman, *Computer Science,* Degree-Driven Design of Geometric Algorithms for Point Location, Proximity and Volume Calculation. Professor Jack Snoeyink.

Alex Fuller Mills, *Statistics and Operations Research,* Patient Prioritization and Resource Allocation in Mass Casualty Incidents. Professor Nilay Tanik Argon and Serhan Ziya.

Shalini Minocha, *Pharmaceutical Sciences,* Investigations into the Mechanisms of Cell Death: The Common Link Between Anticancer Nanotherapeutics and Nanotoxicology. Professor Russell J. Mumper.

Ashley Isaac Naimi, *Epidemiology,* Causal Inference in Occupational Epidemiology: Asbestos, Lung Cancer Mortality and the Healthy Worker Survivor Effect. Professor Stephen R. Cole.

Scott Philip Nichols, *Chemistry,* Tissue Integration and Antibacterial Effects of Surface-Derived Nitric-Oxide Release. Professor Mark H. Schoenfisch.

Christopher Robert Noel, *Microbiology and Immunology,* The FhaB Prodomain of Bordetella Affects the Biogenesis of Filamentous Hemagglutinin, Influencing Bordetella Virulence. Professor Peggy A. Cotter.

Joel Pereira, *Mathematics,* On the Cohen-Macaulay Property of Quotients of Conical Algebras by Monomial Ideals. Professor James N. Damon.

Kimberly Ann Peters, *Biology,* The Role of Canonical and Non-Canonical Regulators of Heterotrimeric G Protein Signaling During Drosophila Melanogaster Morphogenesis. Professor Stephen L. Rogers.

Elizabeth Grace Pollom, *Biochemistry and Biophysics,* Structure and Function of Lentiviral Genomic and Messenger RNA. Professor Ronald Swanstrom.

Fernanda Costa de Queirós, *Maternal and Child Health,* The Effects of Early Life Disabilities on Human Capital Accumulation in Young Adulthood. Professors Carolyn T. Halpern and Anita M. Farel.

Alexander Nathan Raines, *Neurobiology,* Myosin-X in Neuronal Development. Professor Richard E. Cheney.

William Charles Rice, *Physics and Astronomy,* Magnetotransport Studies of Metal-Organic Molecule-Metal Structures: Electronic Transport Through Molecular Films of Alkanedithiols and Valence Tautomers. Professor Frank Tsui.

THE CHANCELLOR'S MEDAL

The chancellor's medal, an emblem of the office of chancellor, is worn during the University's ceremonial occasions. The sterling silver disk, which is three inches in diameter and seven ounces Troy weight, was given to the University by John Sanders, professor emeritus and former director of the UNC Institute of Government, and his wife, Ann Beal Sanders. Modeled by sculptor Pete Hinton and bearing the University seal, it was first worn by Chancellor Paul Hardin during the 1994 University Day convocation.

THE FIRST CAROLINA DIPLOMA

In September 1796 Carolina student Davie Gillespie began working with a group of men to determine the Southern boundary of the United States. His instructors gave Gillespie a document to carry as proof that he had been a student at the University of North Carolina. The document, now in the Library of Congress, was signed by his professors and ended with the statement, "We thought it proper to give him this certificate."

The University's first graduating class in 1798 included Hinton James, the first student to enroll. Seven men received the first documents that by today's standards can be called UNC-Chapel Hill diplomas. One of the original diplomas is in the Southern Historical Collection in Wilson Library.

During the University's early years, commencement at Carolina was a time for examinations and promotions to higher classes. There was a commencement, but no degrees awarded and no graduation.

Thorfinn Riday, *Neurobiology,* Altered Visual Cortical Plasticity and Nigral-Limbic Dopamine Release in Angelman Syndrome Mice. Professor Benjamin Philpot.

Erin MacKenzie Romes, *Biochemistry and Biophysics,* Structural and Biochemical Analysis of Dynein Light Chain-Mediated Homodimerization of Cytoskeletal and Nuclear Pore Proteins. Professor Kevin C. Slep.

Nora E. Rosenberg, *Epidemiology,* Assessing the Prevention Impact of HIV Counseling and Testing in the South African Context. Professor Audrey E. Pettifor.

Allison Elizabeth Rovny, *Political Science,* New Social Risks, Social Policies and Dualization in the Contemporary Welfare State. Professor John D. Stephens.

Marta Sánchez, *Education,* Por Imaginacion y Amor – El Permanecer del Padre Mexicano a Distancia. For Imagination and Love – The Permanence of the Mexican Father Who Fathers at a Distance. Professor George W. Noblit.

Leah Hope Schinasi, *Epidemiology,* Environmental, Occupational and Medical Exposures Associated with Methicillin-Resistant Staphylococcus Aureus Nasal Carriage in Patients Admitted to an Eastern North Carolina Hospital. Professor Steve Wing.

Ashley Land Schoenfisch, *Epidemiology,* The Injury Experience of Union Drywall Carpenters in Washington State, 1989–2008. Professor Steve Marshall.

Naman Kirit Shah, *Epidemiology,* Reducing Malaria Transmission: The Epidemiology and Treatment of Plasmodium Falciparum Gametocytemia. Professor Steven R. Meshnick.

Junko Shimazoe, *Sociology,* The Power of Forgotten Opinions: Why an Organization Chooses Inaction over the Public's Safety. Professor Howard E. Aldrich.

Michael Brady Smith, *History,* Restoring Our Commercial Rights: Silk, Nationalism, Commercial Policy and the Direct Trade Movement in Meiji Japan, 1868–1890. Professor W. Miles Fletcher.

Jamie Robert Snape, *Computer Science,* Smooth and Collision-Free Navigation for Multiple Mobile Robots and Video Game Characters. Professor Dinesh Manocha.

Sarah Jeanne Stein, *Biology,* The Role of NF-kB in BCR-ABL-Driven Oncogenic Transformation and in Hematopoiesis. Professor Albert S. Baldwin.

Dori M. Steinberg, *Nutrition,* Effect of Daily Self-Weighing on Weight Loss in Adults. Professor Deborah F. Tate.

Jordan Thomas Stobaugh, *Chemistry,* Strategies for Differential Proteomic Analysis by Liquid Chromatography-Mass Spectrometry. Professor James W. Jorgenson.

Daniel Timothy Sweet, *Genetics and Molecular Biology,* The Adaptor Protein SHC is a Critical Regulator of Angiogenic and Shear Stress Signaling in Endothelial Cells. Professor Eleni Tzima.

Ghadeer Thalji, *Dentistry,* Oral Biology; Genome-Wide Assessment of Early Osseointegration in Implant-Adherent Cells. Professor Lyndon F. Cooper.

Jeromy Tompkins, *Physics and Astronomy,* Polarized Photofission Fragment Angular Distributions of 232Th and 238U. Professor Hugon J. Karwowski.

Rachana Rao Umashankar, *Anthropology,* Defending Sufism, Defining Islam: Asserting Islamic Identity in India. Professors James L. Peacock and Lauren G. Leve.

Rachel Dyane Upton, *Psychology,* Examining Characteristics, Motivations and Career Goals of Black Students Who Attend Historically Black Colleges and Law Schools. Professor Abagail T. Panter.

Carmina G. Valle, *Nutrition,* Examining the Use of Online Social Networking to Improve Physical Activity Behaviors among Young Adult Cancer Survivors. Professors Deborah F. Tate and Marci K. Campbell.

Nicole Marie Vincent Jordan, *Pharmacology,* Epigenetic Regulation of Epithelial-Mesenchymal Transition in Epithelial Stem Cells and Triple Negative Breast Cancer. Professor Gary L. Johnson.

Ashley Rae Ward, *Geography,* Echoes in a Changing Urban Landscape: Memories and Place Identity in Durham, North Carolina. Professor Stephen Birdsall.

Heather Wasser, *Nutrition,* Non-Maternal Involvement in Feeding and the Development of Obesogenic Diets among Infants and Toddlers. Professor Margaret E. Bentley.

Stephanie Elaine Watkins, *Epidemiology,* Interventional Physical and Occupational Therapy Services and Motor Coordination Among Low Birth Weight Infants. Professor Julie Daniels.

Buddy Allan Whitman, *Neurobiology,* Neuroimmune Consequences of Chronic Alcohol Exposure: Relationship to Stress. Professor George R. Breese.

David Christopher Williard, *History,* "What a Fall Was There — My Country Ruined!": Confederate Soldiers and Southern Society, 1861–1880. Professor William L. Barney.

Leah Anne Wingard, *Chemistry,* Accessing Intermediate and High Oxidation States with Tungsten and Iridium Pincer Complexes. Professor Joseph L. Templeton.

Todd **D. Woodruff,** *Business Administration,* Goal Influence in Organizational Identification and Post-Choice Behavior. Professor Jan Benedict Steenkamp.

Holly Worthen, *Geography,* The Presence of Absence: Indigenous Migration, a Ghost Town and the Remaking of Gendered Communal Systems in Oaxaca, Mexico. Professor Wendy W. Wolford.

DOCTOR OF PUBLIC HEALTH

Emily Anne Colby, *Biostatistics,* Methods for Population Pharmacokinetics and Pharmacodynamics. Professors Eric Bair and Gary Koch.

Sarthak Das, *Health Policy and Management,* Retention of Patients on Antiretroviral Therapy in the Highlands of Papua New Guinea. Professor Sandra Greene.

Nnekae Ijoma Emenyonu, *Health Policy and Management,* Barriers to HIV Care in Rural Uganda. Professor Sandra Greene.

Gina Suzanne Ogilvie, *Health Policy and Management,* Intention of Women to Receive Cervical Cancer Screening in the Era of Human Papillomarvirus Testing. Professor Suzanne Hobbs.

Jennifer Platt, *Health Policy and Management,* Institutionalizing Sanitation: A Mixed Methods Assessment of the Role of the Health Ministry in Developing Countries. Professor Sandra Greene.

John Michael Wiesman, *Health Policy and Management,* Succession Planning and Management Practice in Washington State Local Public Health Agencies: The Current Situation and Recommendations for Better Practice. Professor Edward L. Baker Jr.

Yue Zhao, *Biostatistics,* Sensitivity Analyses of Time-to-Event Data with Possibly Informative Censoring for Confirmatory Clinical Trials. Professors Gary G. Koch and Amy H. Herring.

The School of Education

ESTABLISHED 1885

Dean G. Williamson McDiarmid

DOCTOR OF EDUCATION

Marguerita Best, *Educational Leadership,* Assistant Principals and Reform: A Socialization Paradox? Professor Catherine Marshall.

Pamela Renee Hill-Cunningham, *Curriculum and Instruction,* Testing Technology: Administering Mathematics Assessments in Kindergarten and First Grade. Professors Susan Friel and Barbara D. Day.

Derrick Jordan, *Educational Leadership,* Looking Beyond School Walls: Examining the Impact of Superintendent Longevity on Teachers' Perceptions of their Working Conditions. Professor Fenwick English.

Jacqueline Jordan, *Educational Leadership,* Why Can't We Have It All? The Conflict between the Principalship and Motherhood. Professor Catherine Marshall

Mia Murphy, *Educational Leadership,* The Self-Perception of Leadership Efficacy of Alternative School Principals and Its Relationship to Student Achievement in the Era of Reform and Accountability. Professor Fenwick English.

Eva Phillips, *Curriculum and Instruction,* An Examination of the Relationship between Kindergarten Children's Access to Developmentally Appropriate Practices and Their Success on Measures of Literacy. Professor Sharon Ritchie.

Matthew Proto, *Educational Leadership,* The Effect of Structural Adaptation on School Turnaround. Professor Kathleen Brown.

Bradford Walston, *Educational Leadership,* The Effect of Adaptive Leadership on School Turnaround. Professor Kathleen Brown.

TAR HEELS

The University uses the nickname "Tar Heels," and the entire state does as well. One version of the nickname's origin has the name first being applied to North Carolinians during the Civil War. One record talks of a battle in Virginia, where their supporting column retreated, but North Carolina troops stood alone to fight successfully. The victorious troops were asked in a condescending tone by some Virginians, who had retreated, "Any more tar down in the Old North State, boys?" The response came quickly: "No, not a bit; old Jeff's bought it all up." The Virginians asked: "Is that so? What is he going to do with it?" The reply: "He is going to put it on you'ns heels to make you stick better in the next fight."

CANDIDATES *for* POSTBACCALAUREATE PROFESSIONAL DEGREES

December 2012

The School of Law

ESTABLISHED 1843
Dean John Charles Boger

JURIS DOCTOR

Justin M. Angell
Kristin L. Butler
Kandace R. Davis
Rachel E. Faultersack
Rachel R. Hall
William D. Kirby
Hector L. Melecio
Sofia N. Mochegova
Lauren Elizabeth Nelson
Hillary Smith

The School of Medicine

ESTABLISHED 1879
Dean William L. Roper

DOCTOR OF MEDICINE

Carrie A. Baldwin
Eric S. Burgon
Lila Farrag
Patrick Knox McNeillie
Russell E. Warburton

THE OLD WELL

At the heart of the campus stands the visual symbol of the University of North Carolina at Chapel Hill. For many years the Old Well served as the sole water supply for Old East and Old West dormitories. In 1897, the well was given its present decorative form at the direction of President Edwin A. Alderman, who described his beautification project as largely derived from the Temple of Love in the Garden of Versailles. In 1954, the well was given added beauty with brick walks, plantings and benches. Legend holds that students can bring good luck with a drink from the Old Well on the first day of classes.

A MESSAGE *to* CAROLINA'S NEWEST ALUMNI

Congratulations! You are now graduates of the University of North Carolina at Chapel Hill. Let your General Alumni Association help you make a seamless transition from students to alumni — no matter where you find yourselves after graduation. Visit alumni.unc.edu/youngalumni.

GETTING STARTED

Don't miss out on special invitations and services. Call (877) 377-7125 or visit alumni.unc.edu/update to keep your official University record updated. Jump start your network with Carolina alumni — join the GAA's groups on Facebook and LinkedIn.

ALUMNI CAREER SERVICES

Networking is the most effective approach to finding a job. The GAA can connect you with more than 7,000 alumni volunteers in our Alumni Advisor Network who can help you explore career options.

GAA members from the Class of 2012 have full access (phone, email or in person) to the GAA's certified career coach for one year following graduation. If you're thinking about grad school, GAA members also receive discounts on Kaplan prep courses.

FINDING OTHER TAR HEELS IN YOUR AREA

- Local Carolina Clubs can be found in nearly 100 cities around the globe. Socialize, network, cheer on the Heels and continue that spirit of Tar Heel service within your community.
- The GAA's Online Alumni Directory can help you develop a network like no other. The directory includes nearly 270,000 former Carolina students.

TRUSTED INFORMATION SOURCE

The "Carolina Alumni Review," the "Out of the Blue" e-newsletter, the GAA's Twitter feed and alumni.unc.edu can keep you updated on the University's achievements and challenges as well as what's going on in Chapel Hill.

Congratulations again. We hope you'll choose to join the nearly 70,000 GAA members who remain connected and help serve Carolina and our students — past, present and future. The GAA offers new grads a one-year membership for only $25 — a $20 savings off our annual dues rate. Or save $50 on life membership — only $28.25/month for 24 months.

For more information on how the Association serves new graduates, please call Brandon Copeland '12 or Diana Koonce '02 at (800) 962-0742 or email membership@unc.edu. Visit us on the Web at alumni.unc.edu.

CANDIDATES *for* GRADUATE DEGREES *and* PROFESSIONAL GRADUATE DEGREES

December 2012

The Graduate School
ESTABLISHED 1903
Dean Steven W. Matson

MASTER OF ARTS

Anthropology
Brittany Glarrow Chamberlain

Education
Lindsay Francine Goldberg
Abram Justin Kline
Josmell J. Perez

English
Jerrod Nathan Rosenbaum

Exercise and Sport Science
Nathaniel Thomas Berry
Justin Freeman

History
Anndal Grace Narayanan

Mass Communication
Sarah Elizabeth Davidson-Palmer
Vanessa Ruth Patchett
Carol Louise Perry

Musicology
Karen Evelyn Atkins

Political Science
Rahim Shiraz Mohamed

Psychology
Sierra Allegra Bainter
Zane Edward Blanton
Jennifer Lynn Green
Renske Suzanne Hoedemaker
Lee Wade Hutson

Romance Languages and Literatures
Katherine Elizabeth Karcher
John Samuel Krieg

Russian and East European Studies
Nicholas Constantine Kanios
Anna Kirey
Hannah Justine Marchman

Sociology
Joseph R. Bongiovi
Christopher Shane Elliott
Sarah Nicole Gaby
Brandon Gorman
Jonathan Horowitz
Maria Del Carmen Huerta-Bapat
Mark Douglas Noble
Niobrá Monique Samuel-Peterson
Philip Edward Weickert

MASTER OF CITY AND REGIONAL PLANNING
Andrew David Stevenson

MASTER OF SCIENCE

Biomedical Engineering
Leslie Baggesen
Steven Glenn Feingold
Nicholas George Hallfors
Jordan Walter Hutchinson
Roger Chai Yu

Biostatistics
Yu Deng
Ellen L. Mir
Christel N. Rushing

Chemistry
Tyler David Jones
Ryan Patrick Vary

Computer Science
Oluwafemi Sharon Alabi
Wei Cheng
Sajal Dash
Jared Scott Heinly
Michael K. Muraya
Kun Peng
Anant Pradhan
Sean Sanders
Vishal Verma
Xiaojie Zhao
Enliang Zheng

Economics
Brian Patterson Goldberger
Brian Sullivan
Matthew Taylor Horne

Environmental Sciences and Engineering
Ramon De Alatorre
Robert Warren Albury
Sarah Marie Hatcher
Rebecca Milsk
Esteban Adrian Oyarzabal
Lisa Singleton-Baldrey

Geological Sciences
George H. Allen

Marine Science
Sungduk Yu

Physics
Kathleen Donnally Eckert
Robert M. Judith
Ava Glenn Pope
Gongting Wu

Statistics and Operations Research
Lu Huang
Qianwen Liu
Ovunc Yilmaz

The Kenan-Flagler Business School
ESTABLISHED 1919
Dean James W. Dean Jr.

MASTER OF BUSINESS ADMINISTRATION
Srinivas Adusumilli
Ryan Patrick Allen
Shareef F. Alshinnawi
Thomas David Arman
Robert Ballew
Benjamin Joseph Barish
Nicholas Joseph Bender
Mayura Bhandarkar
John Alexander Bitsas
Karunakar Bojjireddy
David Buckley
Mahbub Islam Chowdhury
Christopher Ryan Church
Virginia Beaty Cleary
Maria de los Angeles Craig
Drew Joseph Crawford
Robert Houston Davenport III
David Davila
Victor DeMarco
Todd Michael Driscoll
Jeffrey Alvin Duncan
Kevin Michael Dzielecki
Jamie Wayne Earp
Eric M. Eaton
Brian Nelson Ember
Billy R. Ezzell III
Stephen William Farrell
Maximillian Allen Fitch
John Michael Flagg
Andres Forero
Elizabeth Gribble Forshay
Philip Mark Garber
Wilkes Jackson Graham
Vikas Grover
Gerardo Antonio Guifarro
Joseph Gyamfi
Simone Diana Hamlett
John David Heilmann
Christopher A. Huguelet
Morton Oliver Janney
Robert Scott Jeske
Hitendra Sinh Jethwa
Kristine Constance Kelleher
Michael Randall Kertcher
Nathan Michael Kilburn
Jin Sam Kim
Adam Burton King
Amber Starbuck Kirkman
Bruce Allen Kohn

COMMENCEMENT MUSIC

The University's beloved alma mater, "Hark the Sound," evokes the feelings of loyalty and friendship that students, alumni and true blue Tar Heels everywhere have for Carolina. The orchestral marches that accompany the commencement processional are equally memorable for their power and splendor. They are truly fitting musical celebrations of the talent and achievements of UNC-Chapel Hill's visiting dignitaries, faculty and graduates.

During today's commencement ceremony, members of the academic processional will be welcomed by the fanfare brass, woodwinds and drums of Nikolai Rimsky-Korsakov's "Procession of the Nobles" and Richard Strauss' "Konigsmarsch." Rimsky-Korsakov wrote his majestic march to open the second act of the opera-ballet "Mlada," which premiered in Saint Petersburg, Russia, in 1892. Strauss premiered the flourishing "Konigsmarsch" at a palace concert in Berlin in 1907.

The new graduates will exit the ceremony while hearing familiar Carolina melodies in "Tar Heel Rhapsody," a composition written specifically for the University that features its school songs.

William Robert LaFontaine
James Franklin Logan
David Harbison Long Jr.
Matthew Malette Lonnee
Sharon Lycans
Anthony J. Manganaro
Vinay Manhass
John William Matthews
John L. McCormick
Jennifer Fereshteh Mehram
Anastasia Melchina
Katherine Elise Millner
David Charles Moody
Sean Moschberger
Alexander Wade Ogle
Aliou D. Ousmanou
Anna Christina Penner
Nikhil Phansalkar
Vinod Prasanna
Jovani Price
Sandeep Rajan
Scott W. Ranby
Spenta Michael Rawaan
Christopher Scott Reavis
Eugene Edwin Record III
Erik R. Rexo
John C. Richter
Derek Damone Ross
Dinesh Sadhvani
Shaun P. Sanders
Rodney Parthemer Scott
Hari Shankar
Amith Padmanabha Shenoy
Tyler Shields
Sean Michael Siler
Eric James Skow
Emily Williams Smith
Melissa Rae Sowry
Erika Hope Stinson
Joel Edward Stinson
Wei Min Eugene Tay
Kern Ryan Taylor
Tonya Simpson Terry
Brian N. Top
Elizabeth Ann Wicker
Travis Scott Wilds
Simon Wilson
Andrew Winzenz
Julie C. Wix

The School of Education

ESTABLISHED 1885
Dean G. Williamson McDiarmid

MASTER OF EDUCATION
Rachel Sima Bachenheimer
Jennifer Rae Bonilla
Christine Ann Daughtrey
Jessica Marie Page

The School of Government

ESTABLISHED 2001
Dean Michael R. Smith

MASTER OF PUBLIC ADMINISTRATION
Erik Brandon Osborne
Andrew David Stevenson

The School of Information and Library Science

ESTABLISHED 1931
Dean Gary Marchionini

MASTER OF SCIENCE IN INFORMATION SCIENCE
Robert Lee Cooper
Joshua David Hager
Michelle M. Lopez
Tian Sun

MASTER OF SCIENCE IN LIBRARY SCIENCE
Anne Rachelle Barrett
Jacqueline Emily Chapman
Carolyn Marie Chesarino
Martin Joseph Gengenbach
Kamila Lindsay LaBerge
Sarah Kalikman Lippincott
William Harrison Midgley
Brendan Christopher O'Connell
Jesse Morgan Savage
Lisa Christine Simmons
Melanie Susan Sorrell
Charles Marshall Stroscio
Alexandra Simms Toomey
Meghan Mary Webb

The School of Medicine

ESTABLISHED 1879
Dean William L. Roper

DOCTOR OF PHYSICAL THERAPY
Rachel Jeanne Slife

MASTER OF MOLECULAR DIAGNOSTIC SCIENCE
Lisa Kay Cremeans
Manyu Li
Dev Bharat Patel
Jose Constantino Sevilla
Anurekha Vedaiyan

MASTER OF RADIOLOGIC SCIENCE
Craig D. Byer
Christen M. Crane-Amores
Elvin J. Cuevas
Elizabeth M. Eslich
Lauren Peele Hurdle
Courtney Lea Jadidian
Lenvil Lance Jones
Jason P. Leymeister
Kamau Jaja Nkenge
Lauren E. Ortiz
Kristin Pahl
Amber E. Price-Williams
Cephus Simmons

The School of Nursing

ESTABLISHED 1950
Dean Kristen M. Swanson

MASTER OF SCIENCE IN NURSING
Stacy Lee Carey
Elizabeth Rourke Chapman
Ronda L. Decker
Tamryn LaShea Fowler
Brenda Marie Hallett
Teresa C. Hulseman
Kristin Renee Lauer
Stephanie Nicole Roberts
Bonnie Kluttz Sammons
Sarah Serrano
Barbara Maria Buerke Stephen
Necole Antoinette Tibolla

The Gillings School of Global Public Health

ESTABLISHED 1939
Dean Barbara K. Rimer

MASTER OF HEALTHCARE ADMINISTRATION
Susmita Chavala
William Howard Holding
Emran K. Huda
William Brian Hunter
Eric Wayne Jefferson
Matthew Jonathan Kelm
Edward McCutcheon
Jose Luis Plaza
Abbie Crisp Williamson

MASTER OF PUBLIC HEALTH
Stephanie Ann Allen
Amanda Jean Allman
Jennifer Marie Anderson
Katherine Lynn Barmer

Annette M. Beyea
Katherine F. Blackman
Elizabeth Alanna Boudreau
Michael Dwayne Brooks
Erin E. Cashwell
Sandra G. Clark
Alexandra Caroline Collins
Laura C. Curtin
Elizabeth W. Dehmer
Alison Ruth Doernberg
Shelia Adams Dowd
Lauren Elizabet Elder
Walter Elias III
Nadear Abdurahman Gorashi Elmahi
Haiying Fan
Laura Renee Greenhow
Kendall B. Gurske
Jillian Lynn Hamilton
Laura Klatt House
LeRon Celeste Jackson
Patricia Sue Kempton
Maria Elaine Kennedy
Samantha Theresa Kepler
Emily Anne Kujawa
Mary Elizabeth Kushman
Katrina Beth Levine
Brittney Nicole Martin
Mary Cordon McGee
Terrance Shawn McGill
Karen Lynn Meyerhoff

THE BICENTENNIAL STAFF

The faculty marshal carries the bicentennial staff while leading the faculty processional on ceremonial occasions such as Commencement and University Day. The staff, commissioned for the University's 1993 bicentennial celebration by John Sanders, professor emeritus and former director of the UNC Institute of Government, and his wife, Ann Beal Sanders, was modeled by sculptor Pete Hinton. It consists of a sterling silver three-inch-high replica of the Old Well mounted on a turned and tapered oak shaft. The shaft was made from timber salvaged from the 1822 section of Old West residence hall during its 1991–1993 renovation.

Khanh Hong Nguyen
Erin Ashley O'Quinn
Andrea Drulard Orben
Emily Summer Padian
Ashley Lauren Paynter
Anne R. Petraeus
Anna Christine Pfaff
Allison Walker Rice
Molly Rebecca Ruben
Michael Scott Runyon
Patrick Josey Smith
Jessica Kristen Southwell
Michael J. Steiner
Leah S. Tedrick-Moutz
Kerone Walker
Melissa Jolyn Williams
Lindsay Ann Wilson
Dwight Edward Yin

MASTER OF SCIENCE IN ENVIRONMENTAL ENGINEERING
Brad Northwood Bennett
Rebecca C. Cohen
Chieh-Han Lee
Eliot Stephen Meyer
Jessica Montanez

MASTER OF SCIENCE IN PUBLIC HEALTH
Ayodele Ayoka Alakija
Nadya Maria Belenky
Yael Rose Filossof
Laura Oredola Houenou
Jui-Yen Huang
Alan Christopher Kinlaw
Aliza Kate Liebman
Jennifer Lindsay Moore Moss
Crystal Mela Nicholson-Springer
Bridget Elizabeth O'Brien
Damon Floyd Ogburn
Mirna Yesenia Rauda
Lindsay Stortz
Arianna Taboada
Melissa Anne Tinling
Kara E. Van de Grift
Alexandra Jayne White

The School of Social Work

ESTABLISHED 1920
Dean Jack M. Richman

MASTER OF SOCIAL WORK
Amanda Jean Allman
Katherine F. Blackman
Alexandra Caroline Collins
Alison Ruth Doernberg
Kendall B. Gurske
Khanh Hong Nguyen
Erin Ashley O'Quinn
Erik Brandon Osborne
Mirna Yesenia Rauda
Marlon Correll Smallwood
Arianna Taboada
Kara E. Van de Grift

CANDIDATES *for* BACCALAUREATE DEGREES

December 2012

The College of Arts and Sciences

ESTABLISHED 1795
Dean Karen M. Gil

BACHELOR OF ARTS

African and Afro-American Studies
Mycal Xavier Brickhouse
Bianca Rae Champagne Brown
Konstance Leanne Brown
Qualyn Patrice Brown
Phillip Lamont Goode
Kiera Simone Louissaint
Sherry Lynn Myers*
Samuel Everett Pride

American Studies
Chelsea Sheree Reynolds
Elisabeth Ryan Suttee

Anthropology
Lauren Frances Alexander
Meagan Alexandria Crumpton
Gregory A. Egerton
Sarah Katherine Farnsworth*
Cheryl Irene Johnson
Robert Henry Lowry
Marietta Stafford Stewart
Chalice Warfield Yehling

Archaeology
Sarah Katherine Farnsworth*
Cassandra Dawn McGuire*
Lindsay Nicole McVicar*
Mikel Colin Wein

Art History
Sara Margaret Bass

Asian Studies
Christopher Donald Bingham
Anna Elizabeth Powers*
Saba Afzal Warraich

Biology
Karl Krisst Aguilar Montoya
Zemel Zemiesha Brown
Jesse A. Goldberg
Margaret Elizabeth Green*
Megan Elizabeth Hall
Alivia Iorio
Thomas Bryant Jordan
Emily Grace Lopez
William Cleveland Lovell
Priyanka Manocha
Noah Angelo Pagano
Ankita D. Patel
LaShawn Antoinette Pennington
Ruben Prado
Paige Leigh Reagan
Stephanie Anne Robinett
Lisa Christina Senko
Melissa Margarette Shatzer
Samuel David Shuford
Mary Katherine Sommers
Hannah Jesse McDonough Walker
William Roy Woods
Ji Won Yoon

Chemistry
Jacky Paul Fong
Lukas Gregory Keil*
Heejoong Kim
Michael G. Maggio
Shirin Negmadjanova*
Michelle Anne Ocampo
Jimmy Nicolas Pan
Jean Ra
Timothy William Rodriguez
Dayley Shea Wilson*
Yan Ying Yang

Classics
Maegan Louise Johnson

Communication Studies
Casey Kenneth Barth
Georgeanna Catherine Bowen
Brennan Aram Boyajian
Lauren Lea Bunch
Terrica Victoria Carrington
Xi Chen
Jonathan Javell Cooper
Marquel Kathleen Dougherty
James Edward Dunster
Zachary Thomas Evans
Kyle Louis Fageol*
Dion Latez Guy
Grace Antonia Hartmann
Zach Austin Hunter
Peyton Simmons Jenest
John Nicholas Kepple
Noelle Simone Leader
Laura Leigh Leftwich
Mark Dustin McCarty
Michael Charles McComas
Omar Morales
Ian Patrick Morrison
Shelby Aileen Nash
Elizabeth Shirley O'Hare
Mariko Ohigashi*
Kathryn Matheson Plyler
Allen Jamicah Reynolds
Elizabeth Jordan Rodell
Courtney Danielle Satterwhite
Stacie Nicole Scheuermann
Erik Harrison Sugar
Jessica Carolyn Uzmann
Caitlin Ford Van Sickle

DEGREES WITH DISTINCTION

To graduate with distinction or with highest distinction, undergraduate students must have completed at least 45 academic hours at UNC–Chapel Hill and have an overall grade point average of at least 3.5 or 3.8, respectively.

UNDERGRADUATE HONORS PROGRAM

The Honors Program offers exceptionally well-qualified first-year students, sophomores and juniors an opportunity to take part of their general education curriculum in special honors seminars and honors sections. Honors seminars are special topics courses, limited in enrollment to 15 students and taught by outstanding members of the University faculty. Honors sections of regular departmental course offerings are also limited in enrollment and are taught by permanent members of the University faculty. Honors seminars and sections emphasize critical reading, class discussion and expository writing.

Senior departmental honors programs are provided for students who have demonstrated a very high level of scholastic ability and achievement and who desire to pursue an intensive, individualized program of study in their major discipline. Honors studies ordinarily consist of one or more of the following: the preparation of an honors thesis or essay, an independent research or reading program, an artistic performance or exhibition, or the completion of advanced course work in the major not normally required of students in that major. It is on the basis of participation in senior honors that a student may be graduated from the University "with Honors" or "with Highest Honors."

Madeline Christine Varney
Alfred Williams
Wallace S. Wong

Computer Science
Leander Enrique Lanzo

Contemporary European Studies
William Blake Smith

Dramatic Art
Evangeline Carrere Mee*
Pimpila Nicole Violette

Economics
Karen Keziah Arulsamy
David Bradford Baugus
Joachim Bersztel
John Michael Blackmar*
Matthew Alexander Bonds
Alexander James Cauble
Yan Ling Chan
Melissa Denise Chang
Robert Davis Coleman
Kevin Joseph Dolan
Gabrielle Katheryn Forgione
Nicholas Edward Thompson Gittin
Robertson Walters Greenbacker
Manchen Hao
Michael John Huber
Ryan Cameron Hurd
Jarrett Islam
Wook Jang*
Alexander Matthew Jerman
Xuejiao Jiang
Heather Joy Kagan
Andrew Kakunda
Poonam Pankaj Kalaria
Alexander Dougherty Kane
Kwabena Opuni-Frimpong Keene
Amanda Elizabeth Klanduch
Katherine Faith Knish
Taylor Justice Kolasinski
Brandon Norman Lamoureux
Jonathon Hisao Lew*
Anlong Li*
Christopher Xin Li
Ewen Liadi
James Patrick Locke
Danyun Luo
Andrew May*
Mansi Mehra
Stephen Ray Methvin III
Gema Milanes Hernandez
Hyuk Joo Na
Sabina Nogo*
Stephen Shephard Padgett*
Robert Pan
Erica Frances Papes
Jesse Lee Park
Lauren Elizabeth Player
Edgard Roberto Puente
Bradley S. Reid
Thomas Donald Schrader
Cristopher William Seippel
Sora Shin
Sergio Andres Sime
Samuel Eric Stokes
William Tyler Thompson
Dmitri Vitali Vorontsov
Jeffrey I. Wagman
Meinong Wang
Andrew John Wilbur
Cassandra Renee Willemstein
Elizabeth Mary Woodward
Hye Rim Yang

English
Joseph Peter Bowman
Caleb Joshua Cody
Robert Davis Coleman
Carly Michelle Couch*
Alyssa Kay Duhon
Jennifer Leigh Dutton*
Isabelle Rosemary Hale*
Tiffany Nicole Henry
Harrison Taylor Holbrook*
Mary Elizabeth Hope
Latrisha Anne Jenkins
Natascha Jenkins
Carol Lynn Longoria*
Amber Marlena Lynch*
Dasha Daines Menafee
Rebecca Conner Messinger
Livia Christina Nelson
Ella Ray Ott*
Margo Lynne Raynor
Kathryn Chelsea Reardon
Anna Jean Schroeder*
Rachel Valere Sinning
Jessica Ann Slee
Kevin Sly
Kimberly Meghan Stein
Henry Louis Stephenson*
Madeline Christine Varney
Hannah Taylor Vogel
Maria Connolly White
Johanna Elise Zalesky
Sophia Zhang*

Environmental Studies
Kyle Erick Anderson
Winston Allen Blake
Maria Cristina Flanagan

Exercise and Sport Science
Jordan Alexander Babwah
Chase Dylan Baccus
Lauren Olivia Belk
Cameron Lee Brown
Jaren Roland Burleyson
Tyler Logan Cope
Jordan Mose Curles
Adam Vanoid Curry
Hannah Joy Daly
Kumar Dinesh Dave
Whitney Tyler Deedmeyer
Daisy Karina Delgado
Jordan C. Gafa
Grace Marie Glembocki
James Warren Haeseker
Brad Anthony Hamilton
George Michael Hanna
Sarah Louise Hart*
Kristen Leigh Harvey
Mary Catherine Hollowell
Caitlin Victoria Keiler Hooks
Elizabeth Joan Hurley
Nelson Greer Hurst
Nikolas Bernard Jannetta
Brock Anthony Livorio
Maria Lubrano-Lavadera
David Ashten Malik
Nidia Milet Menjivar
Heather Nicole Moore
Catherine Spencer O'Donnell
Erin Bowman O'Reilly
Kenneth Craig Owens
Melanie Tina Jessica Reyer
Morgan Ariel Roberts
Gene Langston Robinson
Tarron Alonzo Robinson
Kendall Ashley Shields
Ethan Brady Siler*
Ashley Morgan Smith
Christopher Trey Strickland
Parker Crim Thomas

Geography
Kyle Erick Anderson
Chase Dylan Baccus
Abraham Joseph Jaroszewski
Shelley Alanna McGee
Noah Harvey Menaker*
Lorelei Rao

Germanic and Slavic Languages and Literatures
Harrison Collins Compton*
Jesse Dean Crouch
Lowell Elizabeth Hutcheson*
Hyelim Nam
Livia Christina Nelson

Global Studies
John Michael Blackmar*
Burcu Bozkurt*
Christopher Thomas Casberg*
Yan Ling Chan
Maria Graciela Diaz
Deniz Esmen
Robert Kane French*
Kaitlin Nicole Groundwater
Emily Ruth Haines
Shirley Cason Jenkins
Laura Anne Kirchhofer*
Clea Marie Major
Rashida L. Moore
Aaron Glenn O'Neill
Norma Jisselle Perdomo
Jinling Quan
Whitley A. Richards*
Kevin Verlagone Richardson
Jeanna Marie Smialek*
Stella Marie Strohmeier
Julia Rose Taylor
Ariel Genevieve Wyman*

History
Sara Margaret Bass
Andrew James Beckman
Michael Bryant Cohen
Rachel Meredith Davis*
Jennifer Leigh Dutton*
Terran Patricia Greene
Jeffrey Alan Harlan
William McLeon Harris
Jason Kyle Henson
Jonathan Raul Herrera
Kyle Murry Holland
Matthew Hunter Holman
Kathleen Anne Janes
Lynne Ellen Jones*
Monica Catherine Krebs
Cassandra Dawn McGuire*+
Lindsay Nicole McVicar*
Eric Cameron Melton
Boyd Arthur Neal
Nathan Randall Pearl
Jason Pennington

* *Indicates probable candidates for degrees with distinction or highest distinction based on grade point average going into the final semester.*

\+ *Indicates Honors recipients.*

++ *Indicates Highest Honors recipients.*

Lauren Elizabeth Player
Olivia Jordan Poss
William Tucker Pryor
You Kai Puah
John Patterson Pulliam
Margo Lynne Raynor
Ethan Brady Siler*
Moyer Gray Smith
Ella Marie Sullivan*
Mikel Colin Wein
Andrew Joseph Yavorski
Elizabeth Brown Zimmermann
Laura Kenna Zuppo

Interdisciplinary Studies
Evangeline Carrere Mee*+

Latin American Studies
Colin Alexander Anderson
Alexandra Kristin Morris*
Carlos Adolfo Ortiz

Linguistics
Bianca Rajesh Bulchandani
Victoria Ashley De Andrade
Ivy Ilyse Hauser*
Marion Ruth Hicks
Paula Elizabeth Kelly
Philip Hunter McCray*
Elizabeth Shirley O'Hare
Anna Elizabeth Powers*
Kathryn Chelsea Reardon

Management and Society
Casey Kenneth Barth
David Bradford Baugus
Daniel Hudson Blackwell
Sean Christian Burke
Melissa Denise Chang
Jonathan Maxwell Clark
Joie Celeste Hasberry
Alexander Matthew Jerman
Andrew Kakunda
Jeffrey Michael Keeley
Matthew Michael Kolojejchick
Alex J. Maciag
Gema Milanes Hernandez
Thomas Donald Schrader
Levi Abraham Stecker
Thomas Cornay Wood

Mathematics
Morgan Lindsay Alexander
Amber Elizabeth Fickes
Taylor Justice Kolasinski
David Lao
Min Woo Lee
Samuel Eric Stokes
Kayleigh Willis

Music
Nanako Tsurumi

Peace, War and Defense
Aeris Jennifer Alexandros
Rosalind Jane Allen
Justin Lee Bean
Kelsey Renee Brinkman
Monica Nwamaka Chioke
William Caldwell Clement
Lauren Kemp Cloninger
Matthew Robert Cook
Piereangello Cruz
Alexandria Eden Davies
Elizabeth Jane Deane
Kathleen Irmina Diaz
Nicholas Griffin Eakes
Shin Ting En
Kathryn Elizabeth Ferguson
Gabrielle Katheryn Forgione
Nancy McCormick Foy
Rachel Maines Goodrich
Michaele Allexandria Hines
Caitlin Victoria Keiler Hooks
Andrew Robert Hove
Michelle Van Huynh
Philip Harrison James*
Emily Louise Johnston
Lawson Thomas Kluttz
Sara Jeanne Leung
Kadeem Dant'e Lewis
Mindie Lee Loebach
Kendra Chauntell Miller
Amber Marie Mink
Zeeshan Mithani*
Margaret Jennings Nash
Elizabeth Ann Nicholson
Laney Leigh Oaks
Daniel Otarola
Mary Katherine Palmer
Nadia Paige Phipps
Tracy Lynn Powers
Stephanie Christine Ramdat
Deborah Danielle Ross
Andrew Paul Simpson
Cassandra Bernice Slay
Christina Marie Stanton
Eric Lloyd Watson
John Fritzgerald Weeks
Robert Bynum Works

Philosophy
Terrica Victoria Carrington
Brett Allen Fox*
Richard Robert Harenberg Jr.
Joseph Harrison Lee
Dmitri Vitali Vorontsov
Nicholas Adam White

Physics
Jeremy Calvin Ward

Political Science
Katie Elizabeth Atmonavage*
Alex Edward Beuris
Sarah Grayson Bland
Mycal Xavier Brickhouse
Bianca Rajesh Bulchandani
Jonathan W. Burns
Justin Robert Carmen
Jennifer Marie Clark
Paul Spencer Darsie
Therren Jermaine Dunham
Kimzey Lea Ellis*
Deniz Esmen
Carly Nicole Fields
Patrick John Flueckiger
Brett Allen Fox*
Robert Kane French*
Jeremiah Thompson Gerlach
Mariana Jimena Gomez
Paula Andrea Gonzales
Ethan Gray Hendricks
Caline Kit-Lien Hou*
Abraham Joseph Jaroszewski
Shirley Cason Jenkins
Berling Joseph
Monica Catherine Krebs
Sangbuhn Lee
Laura Leigh Leftwich
Justin Merryman Mayhew*
Stephen Ray Methvin III
Sabina Nogo*
Stephen Shephard Padgett*
Hubert Russell Papes
Anastasia Postnikova*
Chelsea Sheree Reynolds
Evan Thomas Ross
Vilas Vishnu Sankar
Alexander Douglas Selig
William Blake Smith
Ella Marie Sullivan*
Wendy Tapia
Eric Lloyd Watson
John Fritzgerald Weeks
Elizabeth Mary Woodward

Psychology
Aeris Jennifer Alexandros
Rosalind Jane Allen
Jacquelyn Nicole Basquill
Kelsey Renee Brinkman
Monica Nwamaka Chioke
Jennifer Marie Clark
William Caldwell Clement
Lauren Kemp Cloninger*
Piereangello Cruz
Adam Vanoid Curry
Alexandria Eden Davies*
Kathleen Irmina Diaz
Alyssa Kay Duhon
Nicholas Griffin Eakes
Shin Ting En
Kathryn Elizabeth Ferguson
Nancy McCormick Foy*
Rachel Maines Goodrich
Chantae Danielle Harris
Michaele Allexandria Hines
Caitlin Victoria Keiler Hooks
Caline Kit-Lien Hou*
Michelle Van Huynh*
Emily Louise Johnston
Kadeem Dant'e Lewis
Mindie Lee Loebach
Paige Erin McClear
Kendra Chauntell Miller
Amber Marie Mink
Margaret Jennings Nash
Elizabeth Ann Nicholson
Laney Leigh Oaks*
Daniel Otarola
Mary Katherine Palmer
Nadia Paige Phipps
Olivia Jordan Poss
Tracy Lynn Powers
Melissa Lucianna Rees
Deborah Danielle Ross
Andrew Paul Simpson*
Cassandra Bernice Slay
Courtney Anne Sorensen*
Christina Marie Stanton
Rachel Marie Stout
John Fritzgerald Weeks
Jessica Michelle Young

Public Policy
Konstance Leanne Brown
Lakesha Nichole Buckner
Jesal Kirit Desai
Zeeshan Haque*
Kathleen Anne Janes
Veronica Joyner
Stephanie Christine Ramdat
Devon Jahmai Ramsay
Heather Seaman*
Andrew Joseph Yavorski

Religious Studies
Lee Gilbert Anderson
Andrew James Beckman
Ashley Elizabeth Best
Ivy Ilyse Hauser*

Romance Languages
Alyssa Lauren Bailey*
Sophie Alexandra Delany*
Kimzey Lea Ellis*
Mireia Sarai Farrell
Sarah Louise Hart*
Philip Harrison James*
Alexandra Jean Mario
Meagan Rebecca Meekins
Alexandra Kristin Morris*
Ella Ray Ott*
Norma Jisselle Perdomo
Whitley A. Richards*
Alexander Douglas Selig
Rachel Valere Sinning
Zoemma Kerr Steffen
Kimberly Meghan Stein
Sebastian Andres Werner

Sociology
Laura Leah Aho
Jordan Michael Diaz
Joyelle Autumn Gordon
Diana Marie Green*
Andre Alonzo Gregorio
Tori Brittany James
Allen Kenneth Johnson
Jessica Laurel Kirby
Jonathon Hisao Lew*
Jessica Anne Lopez
Sarah Elizabeth Moller*
Martin Robert Murphy
Nathalie Noel
Tasha Lee Stanley

Studio Art
Leah Brittany Heidelmeier
Kwabena Opuni-Frimpong Keene
Mariko Ohigashi*
Logan Elizabeth Ripley
Swarnadurga Sivamani
Ariel Genevieve Wyman*

Women's and Gender Studies
Katherine Marie Watkins*

BACHELOR OF FINE ARTS
Katherine Francis Bobeck

BACHELOR OF MUSIC
Caroline Curran Iantosca

BACHELOR OF SCIENCE

Applied Science
Khodjimuradkhon Maksumov
Peter Marshall Mangum*
Natan Siegel

Biology
Kevin Fordyce Andringa*
Justine Marie Beres*
Dylan Huntley Campfield
Andrew N. Chan*
Jeong Hwa Cho
Esther Jin-Joo Choi
Seung Samuel Choi*
Stephen William Cooper
Han Eol Eom
Lukas Scott Erlemann
Luke Scarpino Ferro*++
Patrick Brian Fuller
Julie Francis Gassmann
Joseph Scott Goodwin*++
Michael Loy Gracia
Matthew Adam Hodges*++
Stevi Marie Holmes
William Clifford Hope*
Molly Anne Hornsby*
Lauren Nicole Huey*
Syed Sikender Jaffery*
George Franklin Jones
Julie Marie Kang
Lukas Gregory Keil*
Caroline Suzanne Kirby
Samantha M. LeDonne*
Elizabeth Lee
Kimberly Lauren Mickey*
Kenny K. Namkoong
Vinca Puri
Sarah L. Ricker
Siyuan Peter Sheng*
John Cortland Smith*
Bradley Dewayne Strickland
Alexander Robert Walters
Jillian Danielle Weigel
Sebastian Andres Werner

Chemistry
Gabriela Estefania Agostini Naranjo
Phuongoanh Nguyen Dang
Kyle David Pridgen
Zoe Lee Watson*++
Yu Zhang

Computer Science
Ren Alexander Bauer
Grant Culver Fowler
Zachary Mark MacHardy*
Antonio Gian Paolo Mantovani
Frederick Barrett Meyer
Roger Que*
Joshua Booten Taylor
Kishore Venkat Yedavalli

Environmental Sciences
Samuel McMichael Amos
Michael Ryan Clear
Brian Heesang Lee
Dana Allison Welker

Geological Sciences
Cooper William Harris+
Matthew Franklin Leader
Katherine Louise Moore+
Gabriel Edwin Lee Parrish+

Mathematical Decision Sciences
Xin Chi*
Teofilus Gunawan
Heejoong Kim
Philip Evan Laganis
Min Woo Lee
Robert Pan+
Kyle Arthur Rhash*++
Rachel Whitley Stroud

Mathematics
Gustave Ethan Demilio
John Austin Ellis
Haipeng Gao*
Michael Evan Loiacono

Psychology
Morgan Lindsay Alexander
Hannah Marie Alves*
Anne Frances Cappelletti
Vanessa Chilombo Da Costa
Jaren Grant Dickerson
Gregory A. Egerton
Marcus Ryan Gillon
Brian Hyunki Kim
Andrew David Kimmel
Devin Victoria Kiser
Paige Erin McClear
Nickeisha Moore
Erin Bowman O'Reilly
Malaika Esther Pacque*
Jonas Ian Park
Charles Matthew Summerlin
Matthew Nowell Willey

The Kenan–Flagler Business School

ESTABLISHED 1919
Dean James W. Dean Jr.

BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION
Mohmammad Shahir Amin
Logan Lee Bolick
Joshua Wesley Bridges
Stephen Ward Casscells-Hamby*
Hideki Chida*
Colin Voils Davis*
Matthew Gillis Delafield
Mohammad Zeeshan Farrukh
Adelaide Anne Gay*
Andrew North Glander
Xinzi Gong*
Matthew Ralph Goolsby*
Kara Michelle Jongkind*
Kyrie Elizabeth Joyce*
Christopher Patton Kah
Ryan Andrew Kieras*
Hei Tung Leung
Laurel Anne Loeblein
Jeremy Nathaniel Lutz
Timothy Robert Mertes

* *Indicates probable candidates for degrees with distinction or highest distinction based on grade point average going into the final semester.*

\+ *Indicates Honors recipients.*

++ *Indicates Highest Honors recipients.*

Jared Reed Neely*
Daniel Thomas Potter
Brandón James Quinones
Jeffrey I. Wagman
Jianong Wu
Ruopiao Xu*
Junying Yan*
Ho Yu Yau

The School of Education

ESTABLISHED 1885
Dean G. Williamson McDiarmid

BACHELOR OF ARTS IN EDUCATION
Allison Gregory Murray*
Marit Anna Nelson*

The School of Information and Library Science

ESTABLISHED 1931
Dean Gary Marchionini

BACHELOR OF SCIENCE IN INFORMATION SCIENCE
Cortney Catherine Cogar
Nicholas Scott Eckemoff
Richard Colin Jennings
Allison Jeanne Kupatt
Jesse Collin Pegg
Marla C. Sullivan*++

The School of Journalism and Mass Communication

ESTABLISHED 1924
Dean Susan Robinson King

BACHELOR OF ARTS IN JOURNALISM AND MASS COMMUNICATION
Matthew Bernard Abadie
Alexandra Aparicio
Katie Elizabeth Atmonavage
Alyssa Lauren Bailey*
Denise Ida Barnes
Courtney Patrice Beal
Georgeanna Catherine Bowen
John Andrew Couch
Paul Spencer Darsie
Ryan Anthony Davis
Ashley Cristine Fernandez
Carly Nicole Fields
Jeremiah Thompson Gerlach
Johnny Gil
William Kelly Green
Erica Leigh Heller
Erin Colleen James
Nathaniel James
Kayla Chantel Kennedy
Alexandra Jean Mario
Justin Merryman Mayhew*
Carter Francis McCall
Christopher Andrew Moore
Miranda Lee Murray
Samuel Morris Rinderman
Adam Daniel Schifter*
Sondra Lynn Schmidt
Todd Kyle Scott
Jeanna Marie Smialek*
Mark Andrew Staines
Katelyn Sophia Trela
Alexandria Jo Wilson
Qianye Yan
Caitlin Marie Yaniec

The School of Medicine

ESTABLISHED 1879
Dean William L. Roper

BACHELOR OF SCIENCE IN RADIOLOGIC SCIENCE
Janna Wesley May

The School of Nursing

ESTABLISHED 1950
Dean Kristen M. Swanson

BACHELOR OF SCIENCE IN NURSING
Erik Matthew Andersen
Andrew DeMott Attix
Barbra Avery Beck
Joseph Michael Biddix++
Kathleen Mairin Boodee*
Destiny P. Breland*
Kristen Ashleigh Carter
Michael William Causey*
Caitlin Paige Culbreth
Stevie Nicole Davenport
Darcy Robin Dennison-Harwood*
Hollister Elizabeth Dibble
Ashley Nicole Dyok*
Miguel Jose Ferry-Hernandez
Riley Rhea Foster
Camille Mae Freeman
Leslie Ann Goodling*
Mary Kathleen Goodwin*++
Qiang Guan
Hanna Brittany Hallbauer
Casey Lauren Harrison
Jacob Robert Haskins*+
Megan Elizabeth Hildebran
Nathaly Infante Hill
Kelly Alexandra Hughes
Amanda Gabrielle Hunsucker
April Marie Husenita*
Marie-Anne Sylvie Jean
Cynthia Lachmann-Johnston
Alexander Martin Kass
Julie Elizabeth Kirklin*
Andrew Owen Koch
Dana Leigh Kouchel
Jessica Ann Kyprios
Summer Danielle Langston*
Stephanie Adair Colenda Lea
Megan Danielle Lucovsky*+
Amy Bahr Margison
Francia Elena Marin
Tyler Frederick Marva
Jessica Adrienne McCann
Jennifer Grace McFadden
Jenna Elizabeth McIntosh
Samuel Alexander Morse*
Paul Nguyen
Jane Opudo Ochieng
Noah Angelo Pagano
Leah Gertrude Parks*
Ajay Bankim Patel*
Aaron Mitchell Peak
Alissa Moore Portenier
Jennifer Elizabeth Price*
Bridget Akwetey Quaye
Emily Elizabeth Reynolds*
Leah LeMaster Rose*
Lauren Leigh Sauve*+
Karin Marie Schudel*
Sara Morgan Scott
Isha Shah*
Stephanie Nicole Shannon
Courtney Anne Sorensen*+
Sara Ann Spillane*
Catherine Leigh Stang
Elizabeth Clark Stocksdale*
Merle Chui Yi Tai
Lauren Elizabeth Tesch*
Amber Marie Thomas
Stefanie Thomas
Yanina Moreno Wyniemko
Chelsea Ann Zurl*

The Gillings School of Global Public Health

ESTABLISHED 1939
Dean Barbara K. Rimer

BACHELOR OF SCIENCE IN PUBLIC HEALTH
Burcu Bozkurt*+
Avery Katherine Bullock
Allison Grace Cummings*
Matthew Bennett Jernigan
Joseph Roy Parker IV*
Henry Tang Zhang

Candidates Commissioned in The Armed Forces

DECEMBER 2012

UNITED STATES AIR FORCE SECOND LIEUTENANT
John Michael Blackmar
Jason Pennington

UNITED STATES NAVAL ENSIGN
Tyler Frederick Marva

* *Indicates probable candidates for degrees with distinction or highest distinction based on grade point average going into the final semester.*

\+ *Indicates Honors recipients.*

++ *Indicates Highest Honors recipients.*

CANDIDATES *for* CERTIFICATES

December 2012

Undergraduate Certificates

The School of Medicine
ESTABLISHED 1879
Dean William L. Roper

CERTIFICATE IN RADIOGRAPHY
Mandi D. Cooke

Postbaccalaureate Certificates

The School of Journalism and Mass Communication
ESTABLISHED 1924
Dean Susan Robinson King

CERTIFICATE IN TECHNOLOGY AND COMMUNICATION
Kenneth Wayne Berry
Jessica Carlson
Brian Elvin Cox
Judith Michelle Panitch
Melinda F. Rains
Anne Randolph Sutton
Kimberly Lynn Workman
Stephen Kyle York

The Gillings School of Global Public Health
ESTABLISHED 1939
Dean Barbara K. Rimer

CERTIFICATE IN CORE PUBLIC HEALTH CONCEPTS
Susan Elizabeth Barham
Nathan William Epling
Silena L. Faulkner
Lisa Marie Gehtland
Rory Forseth Leisegang
Amer Saeed Malik
Grayson Mitchell Privette
Shriya Soora
Catherine Soriano
Sharmila Udyavar

CERTIFICATE IN FIELD EPIDEMIOLOGY
Molly Sharon Severson
Kelly Trent

CERTIFICATE IN GLOBAL HEALTH
Alyssa Ferri
Kelly Marie McDonald
Laura Joan Philpot
Stephanie Lynn Warner

CERTIFICATE IN OCCUPATIONAL HEALTH NURSING SPECIALTY
Vincent Edward Pair

CERTIFICATE IN PUBLIC HEALTH LEADERSHIP
Eva Lorenz

GRADUATE DEGREES

August 2012 | *Graduates' names are followed by their area of major study, dissertation or project title and the name of their doctoral advisor.*

The Graduate School

ESTABLISHED 1903
Dean Steven W. Matson

DOCTOR OF PHILOSOPHY

Lee M. Adcock III, *Education,* Re-Casting the Hollywood Indian: Technology Integration at Sequoyah Schools. Professor Cheryl Mason Bolick.

Caroline Bliss Adelman, *Psychology,* Examination of Concurrent and Longitudinal Associations among Emotional Reactivity to Stress, Interpersonal Problem-Solving and Adolescent Nonsuicidal Self-Injury. Professor Mitchel J. Prinstein.

Robert Erle Barham, *English,* Rhetorical Failure in English Renaissance Literature. Professor Jessica Wolfe.

James Berry, *Business,* Do We Have Creative Differences? How We Construe Creativity Influences: The Salience of Novelty and Usefulness. Professor David A. Hofmann.

Rebecca H. Best, *Political Science,* Negotiation in the Shadow of an Extremist Threat: Insurgencies and the Internal Commitment Problem. Professor Navin Bapat.

Allison Margaret Bigelow, *English,* Mining Empire, Planting Empire: The Colonial Scientific Literatures of the Americas. Professor Timothy Marr.

Anne Michele Blankenship, *Religious Studies,* Steps to a New World Order: Ecumenism and Racial Integration during the World War II Japanese American Incarceration. Professor Laurie Maffly-Kipp.

Laura E. Blue, *Chemistry,* Synthesis, Physical Characterization, and Chromatographic Performance of 1.7 μm and 1.1 μm Superficially Porous Particles Packed in Capillary Columns for Liquid Chromatography. Professor James W. Jorgenson.

Angela Yarnell Bonino, *Speech and Hearing Sciences,* The Effect of Signal-Temporal Uncertainty during Childhood. Professor Lori J. Leibold.

Asya Lazarova Borikova, *Pharmacology,* Regulation and Function of Cerebral Cavernous Malformation Proteins. Professor Gary L. Johnson.

Heather Lee Branstetter, *English,* An Alfa-Omega Approach to Rhetorical Invention: Queer Revolutionary Pragmatism and Political Education. Professors Jordynn Jack and Jane Danielewicz.

Anna Brigevich, *Political Science,* Territorial Identity Configurations in the European Union: The Impact of Regional Identity on Attachment to Europe and Support for Integration. Professor Liesbet Hooghe.

Emily Suzanne Brouwer, *Epidemiology,* Myocardial Infarction among HIV-Infected Patients Enrolled in the North Carolina Medicaid Program. Professor Til Sturmer.

Randy M. Browne, *History,* Surviving Slavery: Politics, Power and Authority in the British Caribbean, 1807–1834. Professor John Wood Sweet.

Jessica Caroline Cardenas, *Pathology,* The Role of P16 ^{Ink4A} Expression in the Age-Related Risk of Venous Thromboembolism. Professor Frank C. Church.

David Cavallo, *Nutrition,* Using Online Social Network Technology to Increase Social Support for Physical Activity: The Internet Support for Healthy Associations Promoting Exercise (INSHAPE) Study. Professor Alice S. Ammerman.

Fernando Chague, *Economics,* Conditional Betas: Asymmetric Responses to Good and Bad News. Professor Eric Ghysels.

Roseanne Marie Cheng, *Physics and Astronomy,* Tidal Disruption of a Star by a Massive Black Hole Computed in Fermi Normal Coordinates. Professor Charles R. Evans.

Karen Ann Cherkis, *Genetics and Molecular Biology,* Structural Analyses of AvrRpm1 and HopBA1: Two TTSS Effectors from the Plant Phytopathogen Pseudomonas Syringae. Professors Jeffery L. Dangl and John E. Sondek.

Alexandros Christodoulou, *Psychology,* Variation in Word Duration and Planning. Professor Jennifer E. Arnold.

Jeremy Cook, *Economics,* Essays on Teacher Mobility. Professor Donna Gilleskie.

Damien Croteau-Chonka, *Genetics and Molecular Biology,* Genetic Contributions to Obesity and Related Complex Traits in the Cebu Longitudinal Health and Nutrition Survey. Professor Karen L. Mohlke.

Boyi Dai, *Human Movement Science,* The Relationships between Performance and ACL Loading during Athletic Tasks. Professor Bing Yu.

Craig Dalton, *Geography,* Mashing-Up Maps: Google Geo Services and the Geography of Ubiquity. Professor Scott Kirsch.

Jean M. Davidson, *Biology,* S Phase-Coupled E2F1 Destruction Ensures Homeostasis in Proliferating Tissues. Professor Robert J. Duronio.

Marco Alexandre de Oliveira, *Comparative Literature,* Cannibal Logic: Latin America under the Sign of an Other Thinking. Professor Federico Luisetti and Walter Mignolo.

Carrie Duncan, *Religious Studies,* The Rhetoric of Participation: Gender and Representation in Ancient Synagogues. Professor Jodi Magness.

Margaret Elizabeth Duncan, *Pharmacology,* Characterization of Mechanisms of Antibiotic Resistance in Neisseria Gonorrhoeae. Professor Robert A. Nicholas.

Alan R. Ellis, *Social Work,* Effortful Control, Social Information Processing and the Prevention of Aggression in Elementary Schools. Professor Mark W. Fraser.

Sherine El-Toukhy, *Journalism and Mass Communication,* Priming Optimism: The Automaticity of Health Risk Perceptions. Professor Jane D. Brown.

Brandon K. Essary, *Romance Languages,* The Economy and Parody of Matrimony in Boccaccio's Decameron. Professor Dino S. Cervigni.

Matthew Barker Fariss, *Anthropology,* Gallinazo Phase Migration in the Moche Valley, Peru. Professor Brian R. Billman.

Lauren Elin Fovargue, *Mathematics,* Addressing the Computational Cost of the Immersed Boundary Method through Mulit-Implicit and Multi-Rate Strategies with Time Parallelism. Professor Michael L. Minion.

Megan Freeman, *Psychology,* Gene-Environment Interaction in Early Onset Bipolar Disorder. Professor Eric A. Youngstrom.

Christopher J. Gagliardi, *Chemistry,* Coupled Electron Proton Transfer in Biological Redox Substrates. Professors Thomas J. Meyer and Holden Thorp.

Nathan Geraldi, *Marine Sciences,* Oyster Reef Ecology and Restoration: Findings from Field and Mesocosm Studies. Professor Charles H. Peterson.

Rudresh Ghosh, *Physics and Astronomy,* Metal Oxide Thin Film Growth by Laser Ablation and Its Applications in High Surface Area Photoanodes. Professor Rene Lopez.

Arthur Gibb, *Political Science,* Implementing U.S. Security Strategy in the 21st Century: A Three-Part Examination of the Evolving Role of the Military in American Foreign and Security Policy. Professor Mark J. C. Crescenzi.

Clare Marks Gibson, *Psychology,* An Investigation of the Effects of Oxytocin on Social Cognition and Social Functioning in Schizophrenia. Professor David L. Penn.

Cary Gillenwater, *Education,* Graphic Novels in Advanced English/Language Arts Classrooms: A Phenomenological Case Study. Professor Madeleine Grumet.

Benjamin McMillen Goerger, *Human Movement Science,* The Effect of Anterior Cruciate Ligament Injury and Reconstruction on Lower Extremity Biomechanics, Coordination and Variability. Professor Darin A. Padua.

Jason Rosenbaum Goldsmith, *Pharmacology,* Mechanisms of Mu Opioid Receptor Mediated Protection from Multiple Models of Acute Injury. Professor Christian Jobin.

Inmaculada Gomez Soler, *Linguistics,* Acquiring Spanish at the Interfaces: An Integrative Approach to the L2 Acquisition of Psych-Verbs. Professor Misha Becker.

Susanne Gomoluch, *Germanic Languages,* Redeeming the Imagination: The Case Study, Literature and Medical Discourse around 1800. Professor Jonathan Hess.

Donald Lee Goss, *Human Movement Science,* A Comparison of Lower Extremity Joint Work and Initial Loading Rates among Four Different Running Styles. Professor Michael T. Gross.

Joshua Michael Gray, *Geography,* Understanding Regional Water Resource Dynamics Due to Land-Cover/Land-Use and Climate Changes in the North Carolina Piedmont. Professor Conghe Song.

John D. Guerry, *Psychology,* Towards a Biopsychosocial Model of Adolescent Self-Injurious Thoughts and Behaviors. Professor Mitchell J. Prinstein.

Mustafa Haluk Guler, *Economics,* Housing Wealth Effects Mechanism and the Monetary Policy Transmission in Turkey. Professor Richard T. Froyen.

Stephen J. Guy, *Computer Science,* Geometric Collision Avoidance for Heterogeneous Crowd Simulation. Professors Ming C. Lin and Dinesh Manocha.

Quaker Elizabeth Harmon, *Epidemiology,* Variations in Inflammatory and Cell Cycle Genes and Preterm Birth, Small for Gestational Age and Hypertensive Disorders of Pregnancy. Professor Stephanie M. Engel.

Shawnya L. Harris, *Art History,* Conceptualizing African American Art: The Market, Academic Discourse and Public Reception. Professor Lyneise E. Williams.

Hannah Reed Harwood, *School Psychology,* The Relationship between Attention Problems, Internalizing Symptons and Quality of Life in Youth Receiving Outpatient Services. Professors Eric A. Youngstrom and Barbara H. Wasik.

Qianchuan He, *Biostatistics,* Variable Selection, Sparse Meta-Analysis and Genetic Risk Prediction for Genome-Wide Association Studies. Professor Danyu Lin and Hao Zhang.

Pamela Rose Hesker, *Genetics and Molecular Biology,* Defining the Function of Pyrin, the Familial Mediterranean Fever-Associated Protein, in Inflammation. Professor Beverly H. Koller.

Jeremy Dale Hilburn, *Education,* High School Teachers' Perceptions of Teaching Civics to Immigrant Students in a New Gateway State. Professor Xue L. Rong.

Christen Feldmann Holly, *Public Policy,* The Discretion-Capacity Framework: A Conceptual Approach to Analyzing the Dynamics of Federalism and Social Policy. Professor Daniel Gitterman.

Jasmine Ti Hudepohl, *Psychology,* Generalized Restriction: Understanding Anorexia Nervosa in an Interpersonal Context. Professor Donald H. Baucom.

Colin Hughes, *Chemistry,* Total Synthesis of the Proposed Structure of Aldingenin B. Professor Michael T. Crimmins.

Dwight W. Irvin, *Education,* Factors Affecting Adult Talk in the Inclusive Classroom and the Socially Competent Behavior of Preschoolers with Autism Spectrum Disorder. Professors Brian A. Boyd and Harriet Able.

Ning Jin, *Computer Science,* Discriminative Subgraph Pattern Mining and Its Applications. Professor Wei Wang.

Supratek Kundu, *Biostatistics,* Bayesian Nonparametric Methods for Conditional Distributions. Professors David B. Dunson and Pranab K. Sen.

Hoa Van Le, *Epidemiology,* Evaluation of the Performance of the High-Dimensional Propensity Score Algorithm to Adjust for Confounding of Treatment Effects Estimated in Healthcare Claims Data. Professor Til Stürmer.

Brandyn Gregory Rogers Lee, *Mathematics,* A Comparison of Eigencones under Certain Diagram Automorphism. Professor Shrawan Kumar.

Steven Leigh, *Human Movement Science,* The Influence of Technique on Throwing Performance and Injury Risk in Javelin Throwers. Professor Bing Yu.

Steven Morgan Lewis, *Biochemistry and Biophysics,* Computational Protein Interface Design and Prediction with Experimental Constraints. Professor Brian Kuhlman.

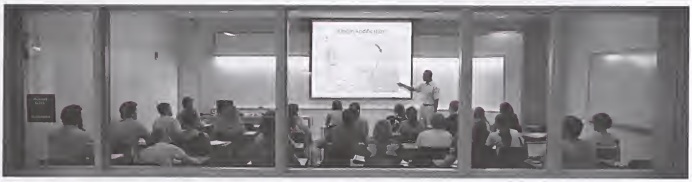
Colin Lickwar, *Genetics and Molecular Biology,* The Role of Set2, Transcription Factor Residence and Nucleosome Spacing in the Dynamic Access of Genomic Information. Professor Jason Lieb.

Cathay Liu, *Philosophy,* Unification in Descartes' Philosophy of Mathematics. Professor Alan J. Nelson.

Katy Liu, *Cell and Molecular Physiology,* Functions of Myosin-X in Polarized Epithelial Cells. Professor Richard E. Cheney.

Dendy D. Lofton, *Environmental Sciences and Engineering,* Factors Regulating Methane Production and Oxidation in Two Shallow Arctic Alaskan Lakes. Professor Stephen C. Whalen.

Diane Losardo, *Psychology,* An Examination of Initial Condition Specification in the Structural Equations Modeling Framework. Professor Sy-Miin Chow.



David S. Lowry, *Anthropology,* For the Healing of the Nations: Lumbee Indian Community, Christian Missions and the Transformative Power of Intervention. Professor James Peacock.

Matthew Lubin, *History,* Aftermath of War: Cypriot Christians and Mediterranean Geopolitics, 1571–1625. Professor Melissa M. Bullard.

Winnie Kavulani Luseno, *Maternal and Child Health,* Effect of the Mchinji Social Cash Transfer Pilot Scheme on Children's Schooling, Work and Health Outcomes: A Multilevel Study Using Experimental Data. Professor Kavita Singh Ongechi.

Ping Ma, *Pharmaceutical Sciences,* Drug-Loaded Lipid Nanoparticles for Improved Cancer Treatment: Engineering, In-Vitro and In-Vivo Evaluation. Professor Russell J. Mumper.

Leah Jill Sirkus McGrath, *Epidemiology,* Influenza Vaccine Effectiveness among Patients on Hemodialysis: Methods to Control the Healthy-User Bias. Professor M. Alan Brookhart.

Jessica Tsesha Meed, *Health Policy and Management,* Home Front — Exploring Associations between Household Structure, Coping Strategies and Behavorial Health Visits within the Military. Professor James V. Porto.

William J. Meyer Jr., *Anthropology,* Home of the Living, Land of the Dead: Dwelling with the Bronze and Iron Age Tombs of Southern Burgundy. Professor Carole L. Crumley.

Stephen Andrew Miller, *Chemistry,* Ultrafast Dynamics in Nanomaterials: From Gold Clusters to Dye-Sensitized Semiconductors. Professor Andrew M. Moran.

Maria Minakova, *Chemistry,* Advanced Computer Simulations of Nanomaterials and Stochastic Biological Processes. Professors Garegin A. Papoian and John M. Papanikolas.

Hayley Mitchell, *School Psychology,* A Longitudinal Examination of Father Involvement and Its Effects on the Social, Emotional and Economic Outcomes of Adult Offspring. Professor Barbara H. Wasik.

Ilyse R. Morgenstein Fuerst, *Religious Studies,* Religions of Empire: Islamicate Texts, Imperial Taxonomies and South Asian Definitions of Religion. Professor Carl W. Ernst.

Zsolt Nagy, *History,* Grand Delusions: Interwar Hungarian Cultural Diplomacy, 1918–1941. Professor Chad Bryant.

Robert Cooper Nathan, *History,* The Blood of Our Heroes: Race, Memory and Iconography in Cuba, 1902–1962. Professor Louis A. Perez Jr.

Punya Navaratnarajah, *Biochemistry and Biophysics,* Total Internal Reflection - Fluorescence Correlation Spectroscopy (TIR-FCS): Application to the Study of Ligand-Receptor Interactions. Professor Nancy L. Thompson.

Britton White Newman, *Romance Languages,* The Narrative of Censorship in Cuban Novels of the 1990s. Professor Rosa Perelmuter.

Ijeoma J. Nwabuzor, *Social Work,* Examining the Risk of Out-of-Home Placement among Child Welfare Involved Families Victimized by Domestic Violence. Professor Mark F. Testa.

Emily Anna Oblath, *Chemistry,* Microfluidic Devices for Performing Multiplexed Immunoassays and Nucleic Acid Tests. Professor J. Michael Ramsey.

Stephen Lecler Olivier, *Computer Science,* Locality Awareness for Task Parallel Computation. Professor Jan F. Prins.

Timothy Gerald Otten, *Environmental Sciences and Engineering,* Ecophysiology and Toxigenicity of Cyanobacterial Assemblages: Molecular Insights into Toxin Production — With Emphasis on Microcystins. Professor Hans W. Paerl.

Sakiko Oyama, *Human Movement Science,* Effects of Trunk Movement on Pitching Biomechanics and Performance in High School Baseball Pitchers. Professor Joseph B. Myers.

Jessica Hyui-Su Park, *Chemistry,* Design of Beta-Haiprins and Beta-Sheets for Molecular Recognition. Professor Marcey L. Waters.

Lisa Parker, *Health Behavior and Health Education,* Positive Prevention with Youth Living with HIV/AIDS in Kinshasa, Democratic Republic of the Congo. Professor Suzanne Maman.

Sarah Elizabeth Parker, *Comparative Literature,* Contrary Signs: Categorizing Illness in Early Modern Literature. Professor Jessica L.Wolfe.

Sharon Denise Parker, *Social Work,* Incarcerated Women: Exploring the Interrelatedness of Intimate Partner Violence, Drug Use and HIV Risk Behaviors. Professor Catherine Fogel.

Michael Vincent Pauluskas, *History,* Moscow on the Potomac: The Soviet Embassy and Detente, 1969–1979. Professor Donald J. Raleigh.

Jolynn Pek, *Psychology,* Fungible Parameter Contours and Confidence Regions in Structural Equation Models. Professor Robert C. MacCallum.

Sherket Breshon Peterson, *Pharmaceutical Sciences,* Defining the Structural Cues within Heparan Sulfate That Direct Heparanase Cleavage. Professor Jian Liu.

David Phillips, *English,* Black Blood/Red Ink: Fact, Fiction, and Authorial Self-Representation in Vladimir Nabokov's Look at the Harlequins!, Marguerite Duras' L'Amant De La Chine Du Nord, and Philip Roth's Operation Shylock: A Confession. Professor John McGowan.

Felix Portnoy, *Information Science,* Avoiding Ad Avoidance: Factors Affecting the Perception of Online Banner Ads. Professor Gary Marchionini.

Kavita Praveen, *Genetics and Molecular Biology,* Modeling Human Spinal Muscular Atrophy Mutations in Drosophila Melanogaster. Professor Gregory Matera.

Martha Friedeman Skiles, *Maternal and Child Health,* An Equity Analysis of Performance-Based Financing in Rwanda. Professor Sian Curtis.

Angela Proctor, *Chemistry,* Development of Peptidase-Resistant Peptide Substrates for Measurement of Protein Kinase B and Bcr-Abl Kinase Activity. Professor Nancy L. Allbritton.

Diana Marie Rancourt, *Psychology,* Potential Mechanism of Peer Influence on Adolescent Girls' Disordered Eating Behavior: An Experimental Design. Professor Mitchell J. Prinstein.

Billye N. Rhodes, *Education,* "We Can Speak for Ourselves": Parent Involvement and Ideologies of Black Mothers in an Urban Community. Professor George W. Noblit.

Vanesa Ribas, *Sociology,* On the Line: The Working Lives of Latinos and African Americans in the New South. Professor Jacqueline M. Hagan.

Jennifer Elise Ringberg, *Anthropology,* Daily Life at Cerro León, an Early Intermediate Period Highland Settlement in the Moche Valley, Peru. Professor Brian R. Billman.

Melinda Margaret Roberts, *Biology,* Genetic Regulation of Cell Death and Disease Resistance in Arabidopsis. Professor Jeffery L. Dangl.

Jane Robertson, *Education,* Self-Efficacy and Collaborative Learning: An Intervention Study. Professor Jeffrey A. Greene.

Jason Michael Rochette, *Chemistry,* Versatile Routes to Photo-Responsive Polyesters for Dual and Triple Shape Memory Biomaterials. Professor Valerie S. Ashby.

Derek Alan Rodriguez, *Information and Library Science,* Developing the "Understanding Library Impacts Protocol": A Method for Detecting and Communicating Academic Library Impact on Student Learning. Professor Helen R. Tibbo.

Hongyu Ru, *Statistics,* Statistical Analysis of Financial Time Series and Risk Management. Professors Eric Ghysels and Chuanshu Ji.

Megan Arlene Rúa, *Ecology,* The Role of Mutualists in Plant Response to Pathogen Infection. Professor Charles E. Mitchell.

Fatimah Sarifah Salleh, *Mass Communication,* Empowered Women Resist: Three Black Women Journalists in the Struggle for Civil Rights. Professors Jane D. Brown and Donald Shaw.

Brandon Sams, *Education,* Reading Acts: An Inquiry into Reading and Teaching. Professor Madeleine Grumet.

Magdalena Traico Sandor, *Physics and Astronomy,* NMR Study of Local Magnetism, Anelastic Deformation and Liquid Behavior of Bulk Metallic Glasses. Professor Yue Wu.

Ozge Savascin, *Economics,* Endogenously Clustered Factor Approach to Macroeconomics. Professor Neville R. Francis.

Ivana Semova, *Cell and Molecular Physiology,* The Role of Gut Microbiota and Diet in Lipid Metabolism. Professor John F. Rawls.

Sarah Shair-Rosenfield, *Political Science,* Electoral Reform, Party System Evolution and Democracy in Contemporary Indonesia. Professor Jonathan Hartlyn.

Dan Shen, *Statistics,* Sparse PCA Asymptotics and Analysis of Tree Data. Professors Steve Marron and Haipeng Shen.

Aram Shepherd, *English,* The Contours of America: Latin America and the Borders of Modernist Literature in the United States. Professor María DeGuzmán.

Jennifer Gentry Shields, *Environmental Sciences and Engineering,* Utilization of Microbial Source-Tracking Markers to Inform Targeted Remediation and Predict Potential Pathogens in High Priority Surface Waters. Professor Jill Stewart.

Cheryl Ann Smith-Miller, *Nursing,* Type 2 Diabetes Self-Management: Influences on Nutritional Practices and Physical Activity among Spanish-Speaking Limited-English Hispanics. Professor Diane C. Berry.

Jesica Speed, *Communication Studies,* Working Artists. Professors Madeleine R. Grumet and Steve K. May.

Karen Cruz Stapleton, *English,* Reading Food: Gender, Ethnicity and Transnational Identities in Latina Literature. Professor María DeGuzman.

Kimberly Michelle Steward, *Chemistry,* Strategies for the Synthesis and Use of β-Stereogenic α-Keto Esters. Professor Jeffrey S. Johnson.

Peter Benjamin Stranges, *Biochemistry and Biophysics,* Design of Protein-Protein Interactions Via β-Strand Pairing. Professor Brian Kuhlman.

Andrew Stuart, *Chemistry,* Optimization and Characterization of New Materials to Enhance Performance of Polymer Solar Cells. Professor Wei You.

Wei Sun, *Pharmaceutical Sciences,* Develop Small Molecule Regulators of GTPase-Activating Proteins of ADP-Ribosylation Factors (ARFGAPs). Professor Qisheng Zhang.

Elizabeth Thill, *Classics,* Cultural Constructions: Depictions of Architecture in Roman State Reliefs. Professor Monika Truemper.

Claudio Viotti, *Mathematics,* Analytical and Numerical Studies on Stratified Fluid Flows. Professors Roberto Camassa and Richard M. McLaughlin.

Catherine Joy Vladutiu, *Epidemiology,* Motor Vehicle Crashes and Adverse Maternal and Fetal Outcomes among Pregnant Drivers in North Carolina. Professor Charles Poole.

David Biaozhi Wei, *Pharmaceutical Sciences,* Economic Evaluation of Biological Therapy Use among Patients with Crohn's Disease. Professor Joel F. Farley.

Erich Alan Werner, *English,* Rants, Reactions and Other Rhetorics: Genres of the YouTube Vlog. Professor Jordynn Jack and Daniel Anderson.

Sarah Taves Whitley, *Neurobiology,* Investigating the Glial Contribution to Persistent Neuropathic Pain. Professor Ken McCarthy.

Elizabeth Marie Widen, *Nutrition,* Applying a Mother-Infant Dyad Perspective to Examine the Nutritional Interrelationships of HIV-Infected Malawian Mothers and Their Exclusively Breastfed Infants. Professor Linda Adair.

David C. Anderson Wiltshire, *Classics,* "Hopeful Joy": A Study of Laetus in Vergil's Aeneid. Professor James J. O'Hara.

Amy C. Wollish, *Microbiology and Immunology,* Contributions of the Host Immune Response to Control and Protection upon Infection with a Neurovirulent Alphavirus. Professor Mark T. Heise.

Jordan Womick, *Chemistry,* Nonlinear Optical Studies of Natural and Artificial Light Harvesting Antennae. Professor Andrew Moran.

Tong-Yng Wu, *Biomedical Engineering,* Novel Cheminformatics Methods for Modeling Biomolecular Data in High Dimension Low Sample Size (HDLSS) Chemistry Space. Professors David Lalush and Alexander Tropsha.

Hao Xu, *Computer Science,* How to Efficiently Implement an OSHL-Based Automatic Theorem Prover. Professor David Plaisted.

Jing Xu, *Chemistry,* Precisely Engineered Protein-Based PRINT® Particles for Delivery of Nucleic Acids. Professor Joseph M. DeSimone.

Weichen Xu, *Pharmaceutical Sciences,* Peptide-Based Biosensors and Light-Activatable Proteins: Tools for Studying Cell Signaling and Developing Cancer Diagnosis. Professor David Lawrence.

Liqiang Yang, *Materials Science,* Design Strategies for Polymer Solar Cells of High Efficiency and Low Cost: Materials, Interface and Device Structures. Professors Wei You and Edward Samulski.

Susan Elaine Young, *Nursing,* A Qualitative Analysis of Aftercare Service Provision for Survivors of Sex Trafficking in North Carolina. Professor Diane Kjervik.

DOCTOR OF PUBLIC HEALTH

Thomas Price Britton, *Health Policy and Management,* Mandated Treatment, 12-Step Support Groups, and Criminal Recidivism Policy Implications and Perspective. Professor Peggy Leatt.

Kristine E. Shields, *Health Policy and Management,* The Participation of Pregnant Women in Clinical Research: Implications for Practice within the U.S. Pharmaceutical Industry. Professors John E. Paul and Suzanne H. Hobbs.

The School of Education

ESTABLISHED 1885

Dean G. Williamson McDiarmid

DOCTOR OF EDUCATION

Sharon Bond, *Curriculum and Instruction,* Secondary Science and Mathematics Teachers' Perceptions of Support and Induction. Professor Rita O'Sullivan.

John Wheeler, *Educational Leadership,* N.C. Superintendent Turnover. Professor Fenwick English.

ACADEMIC DRESS

The following information, based in part on An Academic Costume Code and Ceremony Guide (published by the American Council on Education), may be helpful in identifying academic attire worn during UNC's Commencement exercises.

DEGREE CANDIDATES' REGALIA. The University's bachelor's gown was redesigned last year by award-winning colorist and fashion designer Alexander Julian — a Chapel Hill native and UNC alumnus — to be both Carolina blue and truly green, as in sustainably made. The fabric for the new True Blue gown is made from 100 percent post-consumer recycled plastic bottles (23 bottles for each gown) and is manufactured at mills in the Carolinas. The information about the gown's sustainability is suitably printed directly on the cloth, without the use of an extra label. In addition to being dyed a custom Carolina blue color, the True Blue gowns also have a more streamlined fit, white piping along the yoke and two white panels in front. The new tassels are blue and white, topped with a silver-colored Old Well medallion. An optional accessory is an embroidered white stole that the graduate may give to a parent in gratitude after the Commencement ceremony.

The untrimmed, black master's gown has a hood and an oblong sleeve, open at the wrist, that hangs nearly to the ground; the back part of its oblong shape is square cut and the arc in the front is cut away. The hooded doctoral gown features three bars across each sleeve. In 1999, the Faculty Council authorized a special doctoral gown for Carolina graduates. It is Carolina blue, with facings and crossbars of dark blue outlined in white piping. The facings bear the shield of the University supported by the torches of learning.

The hoods of master's and doctoral degree candidates vary in color according to the field of study (see list below).

FACULTY REGALIA. Faculty wear the regalia of the institution that conferred their highest degree. The doctoral gowns are usually faced with black velvet, although the color of the velvet may vary according to the field of study. Hoods, which differ in length according to the level of the degree held, are lined with official colors of the university or college that conferred the degree, usually with one color forming a chevron pattern over the other. Some colors you will see on faculty and administrators' robes are, for example, the crimson of Harvard, the maroon of Chicago, the orange and black of Princeton, the dark blue of Yale, and the light blue and white of North Carolina.

Like the hoods of master's and doctoral degree candidates, faculty hoods are edged and bound with velvet in the color appropriate to the field of study. The colors in the hoods and gowns of faculty and administrators represent the following fields in which degrees were taken:

APRICOT: Nursing
BROWN: Fine Arts
CITRON: Social Work
CRIMSON: Journalism
DARK BLUE: Philosophy
GOLDEN YELLOW: Science
GREEN: Medicine
LEMON YELLOW: Library Science
LIGHT BLUE: Education
LILAC: Dentistry
OLIVE GREEN: Pharmacy
ORANGE: Engineering
PEACOCK BLUE: Public Administration
PINK: Music
PURPLE: Law
SAGE GREEN: Physical Education
SALMON PINK: Public Health
SCARLET: Theology
YELLOW BROWN: Commerce, Business, Accountancy
WHITE: Arts, Letters, Humanities

POSTBACCALAUREATE PROFESSIONAL DEGREES, GRADUATE DEGREES *and* PROFESSIONAL GRADUATE DEGREES

August 2012

The School of Dentistry

ESTABLISHED 1949
Dean Jane A. Weintraub

DOCTOR OF DENTAL SURGERY
Kristin Miyoko Madden

The Eshelman School of Pharmacy

ESTABLISHED 1897
Dean Robert A. Blouin

DOCTOR OF PHARMACY
Matthew Thomas Starr

The Graduate School

ESTABLISHED 1903
Dean Steven W. Matson

MASTER OF ARTS

Art History
Ryan Patrick Johnson

Education
Aubrey Noel Comperatore
Elizabeth Lynn Greive
Melody Kung
Samathryn Emmanuelle Witham

Exercise and Sport Science
Deanna L. Babcock
Stephanie Allene Bomberger
Robert Jeffrey Bonser
Emily Gibb
Christine May Gilsdorf
Joseph Marc Ingriselli
Kristen Jordanna Koltun
Cecily Marie Lehman
John Patrick Marsh
Charlotte Allen Shatten
Bonnie J. Virag

Folklore
Sara Camp Arnold
Joseph Edward DeCosimo
Marwa Yusuf Koheji
Thomas Craig Owens

Geography
Priscilla Pinto Ferreira Vaz

Linguistics
Jeffrey Kline Gilbert
Emily Moeng

Mass Communication
Megan Elizabeth Camm
Joshua Michael Davis
Tiffany P. Devereux
Theresa A. Flagg
Kelly A. Izlar
Amy Mimi Schiffman
Andrew Royce Westney

Musicology
Molly Leeanna Barnes
Christa Anne Bentley
Aaron Gabriel Rapaport

Political Science
John Granville Cluverius
Robert Anthony Galantucci
Fraser Holmes
John Peter Lappie
Monica Leigh Moore
Mark Yacoub

Psychology
Prerna Bholah
Lisa May Brownstone
Danielle Dean
Melanie Sandy Fischer
Richard Shane Hutton
Daniel B. Lee
Milton Eugene Picklesimer

Religious Studies
Shannon Lorraine Harvey

Romance Languages and Literatures
Julie M. Warner

Sociology
Risa Jean Griffin
Shradha Shrestha

MASTER OF CITY AND REGIONAL PLANNING
Chrishaun Scott Smith
Christopher Wells

MASTER OF SCIENCE

Biomedical Engineering
Benjamin V. Keller
Alexander Timothy Mastro

Biostatistics
Jasperlynn Esther Kao
Kaitlyn Connelly McConville
Kristen Leigh Much
Hongsuk Song
Donna Jean Wilson

Chemistry
Laura Anne Benton
Joseph Lynn Emfinger
Kyle William Olson
Katherine Ann Schmidtke

Computer Science
Anna Dmitriyevna Derbakova
Nicolai Dragan
Rukun Fan
Yang Huang
Shih-Ling Keng
Yinpeng Li
Lei Pan
Yusuf Ali Simonson
Theo Christopher Walker

Ecology
Nicholas Stephen Adams
Naomi B. Schwartz

Economics
Derya Koleoglu

Environmental Sciences and Engineering
Kristen Alexandra Bretz
Lani Michelle Clough
Ryan Bradley Gustafson
Gabriel Edward McGowan
Maya Lakshmi Nadimpalli
Stephen Bradley Teet

Geological Sciences
Colleen McCormick Long
Joshua M. Rosera
Caitlin Renee Rushlow
Jonathon Syrek
Ian Zacharia Winkelstern
Yue Zhang

Materials Science
Zhigang Zhong

Neurobiology
Megan Beckel Kratz

Nutrition
Drew Coleman Millette

Occupational Therapy
Joy Lynn Agner
Katherine Celeste Brewer
Elizabeth Elaine Buse
Amanda Lee Carroll
Hillary Lyn Colter
Michelle Traci Hiatt
Amanda Kay Johnston
Catherine Kane Kaminski

Emily Kathryn Lewis
Nathan Emmanuel MacCosbe
Kendra Sarafina Manhertz
Bridgette Nicole McDougal
Caroline Frances McGhee
Elizabeth R. Merrill
Chelsea Rebecca Nycum
Spencer Edward Perraut
Caroline Maria Pinkston
Sasha Anne Valdez
Elise Bullard Wright

Operative Dentistry
Roopwant Kaur

Oral and Maxillofacial Radiology
Martin E. Evers

Pharmaceutical Sciences
Jacob W. Holler

Pharmacology
Jasmyn Dardy
Brent Douglas Hehl

Physics
Amy Colon

Prosthodontics
Theresa C. Wang

Rehabilitation Counseling and Psychology
Sarah Hahn Archer
Leah Cox
Maria Luz De La Serna Buzon
Rachel Marie Espey
Gina Jessamyn Johnson
Caley Martin Kropp
Sena M. Moran
Kelly Marie Nelson
Laurel Marie Powell
Shahin Dadfar Sabouri
Karie Ann Strader
Amanda Leigh Beaty Tewell
Brooke Michelle Vincent
Caroline Williams

Statistics and Operations Research
Sandeep Sarangi
Ying Song
Tan Xu

The Kenan–Flagler Business School

ESTABLISHED 1919
Dean James W. Dean Jr.

MASTER OF BUSINESS ADMINISTRATION
Evariyel Alegria
John Andrew Balog
Ryan Scott Barry
Juan Carlos Bonell
Douglas B. Carney
John Robert Davis
Alan Neil Golding
Brian Thomas Goral
Rajkumar Viswadoss Iyer
Matthew T. Jones
Eli Pasag Joseph
Sachin Mahajan
William Patrick Metzler
Thomas Joseph Miller
Robin Kathleen Watson Moser
John Patrick Neal
James Michael O'Brien
Manan C. Patel
Aaron Ricker
Easwaran Subramaniam
Kayte Jean Taylor
Sridhar Vaka
Kevin Michael Walsh
Douglas B. Warner
Ryan August Wiese

The School of Education

ESTABLISHED 1885
Dean G. Williamson McDiarmid

MASTER OF EDUCATION
Patricia Albornoz
Kristi Lynn Angstadt
Dawn Marie Baldwin
Michael Anthony Barbaza
Geoffrey Thomas Berry
Rebecca Croteau Black
Kristina Smith Brock
Jessica Elaine Browne
Amber Lynn Buck
Junica Shanee Chavis
Jenna Rae Clark
Melanie Patricia Crawley
Raelene Miller Daley
Melissa Marie Davenport
Keya Shanae Dunn
Danielle Elizabeth Faerber
Krystal L. Forte'
Lauryn Elissa Francis
Mary Margaret Kane Frommer
Sara Rathman Fuller
Susan Elizabeth Gragg
Caroline Elise Guthrie
Jessica Harrington
Cierra Marie Hill
Ann N. Hovis
Rachel R. Huber
Candace C. Jennette
Kelly Reese Jones
Karen Marie Kaczman
Marissa Lynn Kelly
Stacy Elaine Kennedy
Jennifer Ellen Kolb
Linda Waters Long
Robert McAuliffe
Nancy Jane McCracken
Joan Frances Mills
Amy Elizabeth Moffet
Kelly Ann Murphy
Miriam Palma
Susan Pape
Elizabeth Ashley Price
Michelle Reichel
Amy Melaine Brown Rickard
Emily Elise Rinkoski
Christina Denise Robinson
Casandra Bullard Seed
Adelaide Elizabeth Snedden
Morgan Taylor Snyder
Alexander Thomas Soper
Ashley Danielle Stover
Lara Nally Streby
Donna Wilkins Thompson
Allison Bryant Thorb
Elaina Toman
Ashley Elizabeth Tyndall
Donna L. Uhlich
Lauren Elizabeth Vejvoda
Kellye Anne Walton
Anna Blake Watkins
Rolie Adrienne Webb
Iyenda Zakia White
Brian Franklin Woodard
Esther Wu
Bryan Michael Zelski

MASTER OF ARTS IN TEACHING
Kelsie Mariam Adloo
Andrea M. Alvino
Dennis Patrick Baker
Naomi Bracha Barlaz
Kelly Robert Barley
Andrew Hunter Barrett
Mary Katherine Bean
Sarah Elizabeth Brock
James Dennis Brooks Jr.
Tiffany Erin Burgin
Kathryn Joy Byrd
Virginia Burroughs Capps
Marianne Na-Lee Cheng
Eric Rihn DiMarzio
Sarah Lynne Dudley
Jonathan Earl Dusenbury
Elizabeth Ashley Duvall
Kathryn Holly Earnhardt
Anna Maria Gannon
Leah Elizabeth Godfrey
Andreya S. Gomez
Meagan Leigh Hendricks
Catherine Leigh Hickey
Julia Keating Higby-Naquin
Mary Hanna Humphrey
Sara Danielle Hurd
Paul Michael Ingram
So Lim Kim
Lauren Rita Kimmich
Sara Elizabeth Klein
Julie Ann Krenzer-Frybarger
Ting Yuk Lam
Elizabeth Dohyun Lee
Rachel Marissa Lithman
Willem M. Lutter
Andrew Colin Madlon
Amanda Kimberly Manning
Jeffrey Scott Maynard
Allison Leigh Melton
Cassandra M. Montelongo
Molly Lynn Purgason
Elizabeth Frances Rhyne
David W. Ritchie
Lucy Kenyon Roberts
Jessica Lynne Rudd
Jamie Thomas Schendt
Molly Virginia Schultz
Whitney Shattuck
Rachel Berry Surles
Leslie Erin Taylor
Timothy Daniel Uher
Betsy Elise Van Jura
Jordan Elizabeth Webb
Justin Mahlon Webb
Megan Kathleen Wickenden
Leeanna Jean Williams
Melissa Gedachian Zemon

The School of Information and Library Science

ESTABLISHED 1931
Dean Gary Marchionini

MASTER OF SCIENCE IN INFORMATION SCIENCE
Pamella R. Lach
Jimi Radabaugh
Paula Rosalie Rigoli

Beata Halina Rosson
Lee E. Shaw
Caren Melanie Weiner Campbell

MASTER OF SCIENCE IN LIBRARY SCIENCE
Willa Margaret Armstrong
Sofia Becerra-Licha
Alston McNeill Brake
William David Cook
Susan Margaret Craft
Matthew Thomas Dailey
Douglas S. Diesenhaus
Sarah Elizabeth Dooley
Dara Ann Elmore
Matthew John Farrell
Anna Jane Kephart
Kimberly Louise McCray
Kyndal Ann Owens
Jennifer Shona Scully
Armando Suarez
Lauren Rose Tomola
Natalie Rae Vaders
Christopher Joseph Weeg
Matisha Hayden Wiggs
Caitlin Esther Wilson

The School of Medicine
ESTABLISHED 1879
Dean William L. Roper

DOCTOR OF PHYSICAL THERAPY
Lindsey Lee Ashley
Brittany Amanda Cant
Katherine Darshan Culver
Joshua Blake Dunigan
Cari Marie Eicher
Michael Steven Essa II
April Marian Fay
Christina Yvonne Gray
Aisha Jacasta Jones
Sarah Marie Kauk
Alicia Lauren Kinsey
Jesse Lin Kowalski
Amanda Elizabeth Martin
Kelly Ann McCall
Leigh Anne McLaughlin
Jennifer Schultz Mickey
Mary Clare Murray
Derrick Ross O'Neal
Olanike O. Oladele
Kathryn Hannah Pegg
Samantha Marie Price
Kyle Koelle Rascoe
Amanda Elizabeth Reed
Susan Higgins Reeves
Susan Victoria Russell
Sarah Kate Sites Taylor
Ashley Christine Tortorici
Elizabeth Lynn Vaughn
Katie Elizabeth Volkerding
Rachel Elizabeth Wachter

The School of Nursing
ESTABLISHED 1950
Dean Kristen M. Swanson

MASTER OF SCIENCE IN NURSING
Bejal Jayesh Kikani
Rachael Arlene Lorenzen
Lisa Shea Roberts

The Gillings School of Global Public Health
ESTABLISHED 1939
Dean Barbara K. Rimer

MASTER OF HEALTHCARE ADMINISTRATION
Stephen Duncan Arrowood
Kelly Alyse Cook
Jarvis Taumel Gray
Heather Nicole Jacobson
Jessica Eden Factor Landin
Weiyu Liu
Marina A. McLaughlin
Stephen Joel Motew
Kelly Jeffries Pollock
Saria Carter Saccocio
Manas Ranjan Sarangi
William Alexander Shatraw
Jonathan Keaton Thornhill
Khanh Nhat Tran Viet
Christopher Brian Wiggs
Paul Philip Zimmerman

MASTER OF PUBLIC HEALTH
Obafunto Opeyemi Abimbola
Arti Ajmani
Ian Matthew Allen
Diana Allotey
Simon Benjamin Ascher
Alexander Arkin Berger
Rachel Elizabeth Bland
Rachel C. Blasiak
Jillian Ellen Brown
Lisa Martin Carroll
Jeroen Filip De Man
Julie Ann Decoster
Neeti Doshi
Laura Corbin Downey
Michael Alan Gee
Meredith Ashley Gilliam
Catherine Marie Green
Yvonne Greene
Anna Grodecki
Fiona Anne Hahn
Stephanie Allen Harrison
Rachel E. Hines
Bethany Faith Hodge
Michelle McCrain Kiser
Ingrid K. Kotowski
Rachel Morgan Little
Ying Liu
Sasha McGee
April E. Mendoza
Richard Dane Meredith
Sarah Marie Mian
Rebekah White Moehring
Andrew M. Moon
James Thomas Nugent
Scott Trye Owens
Quang Huy Pham
William E. Poe III
Javeria Shaheen Qureshi
William Anthony Rearick
Jonathan Kellen Reid
Sophie Kay Shaikh
Lauren Nicole Simpson
Tracey A. Slaughter
Stuart-Allison Moffat Staley
Paul M Swaney
Bridget D. Teevan
Claire L. Teigland
Maria Theresa Thekkekandam
Sheri Rene Tibbs
Emily E. Waner
Matthew H. Wetschler
Nzingha Jaunita White
Daniel Alan Willner
Jennifer Cantwell Wood
Daniel Jacob Wurzelmann
Carolyn Melinda Ziemer

MASTER OF SCIENCE IN CLINICAL RESEARCH
Erin Teeter Carey
David J. Frantz
Matthew E. Nielsen
Jennifer Hui-Yu Tang
Rachel Peragallo Urrutia

MASTER OF SCIENCE IN PUBLIC HEALTH
Aileen Jenna Beckham
Travis Conrad Book
Sara L. Campbell
Sage Reimer Dunlevy
Grant Cargile Ligon
Sara Elizabeth Mishamandani
Van Thi Ha Nghiem
Rachel Elizabeth Wachter

The School of Social Work
ESTABLISHED 1920
Dean Jack M. Richman

MASTER OF SOCIAL WORK
Katherine Andrea Benzaquen
Emilia Ball Diamant
Derek Paul Easley
Isela Gutierrez

BACCALAUREATE DEGREES

August 2012

The College of Arts and Sciences

ESTABLISHED 1795
Dean Karen M. Gil

BACHELOR OF ARTS

African and Afro-American Studies
Halimat Andrea Alli-Balogun
Anali Gaytan
Folajimi Adedamola Goke-Pariola
Safiyyah Rashae Hassan
Jeremy Tyler Martin
Sabrina Rohanie Officer
Jonathan David Sanchez Jr.
Elizabeth Wangu*

American Studies
James Patrick Finnegan III

Anthropology
Jamee Maria Ernst*
Lucas Joel Espinosa
Meghan Harrison Gilliland
Steven Andres Mieses
Jonathan Clifton Outlaw
Emily Ashton Raper
David Allen Robson
Jennifer Anne Smith
Daniel Glenn Struble
Sara Kaye Wyatt*

Archaeology
Harvey Kirk Bagwell II*
Sara Kaye Wyatt*

Asian Studies
Krystal Rose-Elaine Bush
Laura Elizabeth Harris**
Andrew Ryan Lewis
Virginia Lynn Sparks
Benjamin James Turman*
Jeffrey Alexander Warthon

Biology
Lauren Elizabeth Allen
David Strauss Baron*
Kim Ellen Bird
Kristopher Marcus Brevard
Christopher Alexander Bullock
Stephanie Burkhardt
Avery Grayson Cheves
Jaclyn Louann Cloninger
William Costen
Safia Johara Davis
Jay Spencer Goss
Brian John Gribbon
Phillip David Hamilton
Morgan Taylor Locklear
Nana Ama Anima Ofori
Katie Jo Pova
Christina Lee Raines
Ruhina Riyaz Shemna
Donald Andrew Viets
Spencer Elizabeth Winbourne
Joseph Francis Woodruff*
Jingyi Yang

Chemistry
Alina Diaz
Alexia Vernae Hobbs
Honam Jimmy Lau
Jacquelyn Renee Taft

Classics
Richard Brandon Weiss*

Communication Studies
Stedman Martin Ashley
Meah Denee Barrington
Charles Everett Bartel
Gregory Jerrod Best
William James Bingham
Rachel Erin Blackwelder
Catherine Danielle Blaylock
Alaina Volk Braswell*
Joseph B. Burkhardt
Ariel Lynn Butters
Mary Cameron Caison
Maria Anali Casarrubias Ramirez
Ami-Ruth Cox
Charles Lenard Cox
Lorelei Lynn Evans
Brooke Holland Fentress
Michael Benjamin Fortier
McKenna Kirsten Franchik
Andrew Brian Gaither*
Folajimi Adedamola Goke-Pariola
Cole Chapman Hammack*
Jesse L. Holley
Lynne Marie Hull
Sarah Kenney Hussey
David Whitfield Kenney Jr.
Ross Patrick Maloney*
Chad Jamal Manhertz
Kristina Emenuella McDowell
Hannah Caitlin McGill
Amanda Grace Newton*
Jing Niu
Brooke Ashlee Odom
Edmund Boleshaw Poliks
Christopher Andrew Rajski
Chelsea Hope Ray
Jarett Anthony Roman
Elissa Gail Rumer
Kenan Lewis Stewart
Laura Elizabeth Stoltz*
Breana Cymone Thomas
Kevin Clarence Thomas
Marcus Jahmel Thomas
Sarah Wesley Wheaton
Brent Vassar Williams
Matthew Charles Zachary

Comparative Literature
John William O'Neill**++
Jonathan Brooks Slaughter*
Joseph Francis Woodruff*

Computer Science
Paul Anthony Bouchon
Jonathan Samuel Holston
Han D. Vo

Contemporary European Studies
Zachary Benjamin Toal
Justin Chandler Wilcox

Dramatic Art
Chelsea Ceceille James*
Breana Cymone Thomas

Economics
Delsie-Anne Christina Bailey
Rachel Nicole Bilskie
Cheng Cai
Xi Cao
William Johnstone Carlton
Steven Michael Cebertowicz
Byron Yi Chen
Dongjin Cho
Christopher James Eckert
Amber Marie Fowler
Michael Harrison Frucht
Karl Anthony Hamlin
Sean Ryan Hickey
Jacob Tyler Hurdt
Prajwal R. Kilari
Kichul Kim*
Suhyun Kim
Tayler-Jay M. Kost
Kurtis Kruger
Saang Lee
Hou Weng Lei
Justin Andrew Longoria
Damon Antony McGuire
James John McLaughlin
James Gregory Moye
Jacob Ezra Nouriel*
Alexander Padraic Pellas
Joshua B. Price
Mikhail Radionchenko
John Bradford Rider
Ryan Glenn Sharpe
William Andrew Sheppard
Daniel Eugene Small
John Enver Trevathan
Jeffrey Alexander Warthon
Denis Yip

English
Hope Michelle Basnight
Abbie Rhian Bennett
Emily Jeanene Burris
Bryce Elliot Butner
Deirdre Lynette Corbett
Joseph Burgess Coulter*
Rhoda Joy Davis-Jennings
Jessica Anne Gregory
William Luther Hand
Brian Eric Heim

Michael Boyd Hungate
Chelsea Ceceille James*
Julia Kimmey King
Hannah Caitlin McGill
Ashley Nicole McMorris
Alexandra Hope McPherson**
Elisabeta Pindic*
David Allen Robson
Charlene Joy Ruiz
Jennifer Anne Smith
Andrew John Waszkowski

Environmental Studies
Hunter Bryan Hagy
Heather Rochelle Hyde
Joseph Figueroa McConnell
Alia Kathryn Olson

Exercise and Sport Science
Johnny O'Brian Ashe
Cecelia Anne Crenshaw
Austin Lamar Davis
Nisel Nitinchandra Desai
Ashleigh Nicole Dixon
Thomas Anthony Ferguson
Ian Drake Fryar
Justin Michael Halstead
Blaise Andrew Haubert
Jeffrey Jamal Hawkins
Ashley Nicole Holmes
Scott Joseph Houston
Ebony Ruth Keitt
Sydney Anne Kirk
Caitlin Mae Maliszewski
James Allen Messer
Derek Tyler Murray
Lauren Michelle Myers
Adam Lain Norris
Ashley Denny Parr
Timothy Benjamin Patron
Alexander Padraic Pellas
Roberto Beaumont Rosario
Garrett Evan Skillestad
John Kenneth Strayhorn*
Lauren Alena Temoche
Sean Christopher Zmijewski

Geography
Charles Everett Bartel
Matthew Aaron Mowrer
Mary Michelle Newman
Douglas Franklin Perry
Kendra Anne Schaaf

Geological Sciences
Thomas Edwin Chapman
Patrick Evan Donnelly
Mark Crosbie Hamblin Jr.
Jing Niu+

Germanic and Slavic Languages and Literatures
Mckenzie Campbell Noblitt*

Global Studies
August Jerome Armbrister
Kathryn Nicole Charles
Hunter David Cwalinski
Erica Leigh Detrick*
Jordan Nicole Fletcher*
Allison Alden Gaby
Heather Hileen Hickox
Rebecca Ashley Hundley
Brittany Lauren Johnson
Hou Weng Lei
Allison Leigh McNeill
Abby Elise Moore
Jacob Shaun Riske
Janine Kaye Rose
Arielle Roberta Wright
Denis Yip
Aini Zhou

History
Phillip Russel Benson
Thomas Lee Blaine
Kimberly Rebecca Boyd**
John William Claytor
Robert F. Corriher
Molly Hope Cunningham+
Daryl Albert Emig
Erin Alice Farley
Mark Crosbie Hamblin Jr.
Larry Michael Koonce
Matthew Aaron Mowrer
Kevin Charles O'Connell
Rachel Lee Parks
Jared Keith Simmons
Dain Holden Simpson
Devin Alexander Sloan
Philip Michael Stacks
Kenan Lewis Stewart
Donald Burgess Tilley Jr.
Richard Michael Watt
Stephen Benjamin Wiley
Joshua Austin Young

Latin American Studies
Colton Stiles Foster
Alexandra Yanacek Lowrie

Linguistics
Marguerite Renee Cameron
Colleen Mead
Reed Timothy Weatherill*

UNIVERSITY COLORS

As symbols of unity among Carolina students, alumni and fans, the school colors of light blue and white were first used around 1800 to distinguish between members of the Dialectic and Philanthropic Literary Societies. Throughout the 19th century, students were required to be members of either the Di or the Phi. The Di's color was light blue, and the Phi's was white. At University commencements, balls and other social events, the student officials, managers and marshals wore the color of their society, blue or white. Because the chief marshal or chief ball manager represented the whole student body, not just his society, he wore both colors. When the University fielded its first intercollegiate athletic teams in 1888, the question of what colors to wear had already been answered. Light blue and white had come to symbolize membership in the University, not in a single society.

Management and Society
Vanessa Badillo
Gregory Ryan Becker
Elizabeth Rose Bronson
Robert Blair Hunter
Courtney Yvette Laster
Katherine Elizabeth Rennie
Lauren Ellis Sale
Dean Jacob Segal

Mathematics
Brittany Kennedy Giacco
James Matthew Kelly
Suhyun Kim
Yong Lu*
Ashley Jade Mui*

Peace, War and Defense
John William Claytor
Meghan Leigh Hathcock
Benjamin Scott Kemp
Kyle Stewart Rehder
Jared Keith Simmons
Zachary Benjamin Toal
Aini Zhou

Philosophy
Hanna Jane Bustillo
Jordan Nicholas Council
Amanda Renee Ellis
Stuart Nicole Koury
John James Palumbo
Elisabeta Pindic*
Dain Holden Simpson
Joshua Derek Watkins

Political Science
Madelyn Sloan Barnhill
Edward Austin Brown
Hanna Jane Bustillo
Shawntiel Christine Ditchman
Joseph Keith Estes
Joshua Manuel Gonzalez
Heather Hileen Hickox
William Thomas Hopkins
Tega Charles Jessa
Shannon Celeste Kerr
Christopher Brent Lane
Alexandra Yanacek Lowrie
Jeremy Tyler Martin
James John McLaughlin
Michael Ryan McWaters*
Wesley Shamah Moss
Katherine Elizabeth Rennie
Jonathan David Sanchez Jr.
Morgan Yvette Sills
Whitney Aleece Smith
Sapna Ann Varkey
Justin Chandler Wilcox
Daniel James Woods

Psychology
Stedman Martin Ashley
Ashley Marissa Boraski

* *Indicates degree with distinction based on grade point average.*

** *Indicates degree with highest distinction based on grade point average.*

\+ *Indicates Honors recipients.*

++ *Indicates Highest Honors recipients.*

Erica Kristine Britton
Allison Clair Brown
Kelly O'Keith Chesson
Carrie Mercedith Cooper
Shakota Lashe' Davis
Janelle Renee Ewing
Nicholas Doyle Freeman
Yolanda Michelle Gardner
Treka Lededra Gibbs
Michael David Goodling
David Lee Griffin
Marisa Josefina Guijarro
Robert Blair Hunter
Lauren Gabrielle Iannotte
Ayana Yakima Johnson
Kerry Corvey Kelso
Frenshell Latrice Kizzee
Chelsea Byrd Lang*
Selitta Sharnise Legrand
William Hardison McGoogan
Derek Tyler Murray
Brigid Elizabeth Oldmixon
Ashley Denny Parr
Jenna Anne Petrie
Alexander Bashy Rafiee
Nestor Alexis Ramirez
Mallory Ann Roseman
Hyun Soo Seo
Briana Nicole Shambley
Morgan Helene Sparrow
Rachel Jessica Steiner
Amanda Catherine Stewart
Angela Strickland
Isaac Meade Uhlenberg
Ashley Ann Verplank*
Gavin Pauley Walker
Rebecca Leigh Webster
Benjamin Brummitt Ziccardi

Public Policy
Nisel Nitinchandra Desai

Vanessa Brianne Garber
Taylor Artist Jackson
Larry Michael Koonce
Ashton Dominic Murray
Sapna Ann Varkey

Religious Studies
Amanda Renee Ellis
Phillip David Hamilton
Alex Michael Pyun
Joshua Derek Watkins

Romance Languages
Joseph Keith Estes
Erin Alice Farley
Meleah Kathryn Faucette
Colton Stiles Foster
Gali Bettie Hashmonay*
Sean Ryan Hickey
Annika Krystyna Hugosson
Lauren Gabrielle Iannotte
Chelsea Byrd Lang*
Brittany Denece Long
Michael Ryan McWaters*
John James Palumbo
Angelica Roman
Jonathan Brooks Slaughter*
Lauren Alena Temoche

Sociology
Lakesha Mae Beasley
Lamarr Pearson Davis
Emily Hayworth Eades
Brittany Lashae Glover
Eugenia Drewry Gores*
Brittany Denece Long
Jonathan Clifton Outlaw
Rachel Lee Parks
Diemmi Thi Pham
Ashley Michelle Stadler
Raven Celeste Tate

Kelly Amber Wice

Studio Art
Wyatt Sherman Allgeier
Alaina Volk Braswell*
Kerry Corvey Kelso
Amanda Grace Newton*++

Women's Studies
Justin Antione Felton
Anne Margaret Walker*

BACHELOR OF FINE ARTS
Jennifer Marie Jeffers
Jordana Laine Pfeifer*

BACHELOR OF MUSIC
Aaron Paul Robinson*

BACHELOR OF SCIENCE

Applied Science
Kenneth Jose Addison
Jeffrey Kyle Sechrist
Parth Sanjay Tarasaria

Biology
Matthew Phillip Conti
Brian Paterson Coules
Samantha Diane Freaney
Saul Gonzalez
Paul Gerard Greback-Clarke
Gali Bettie Hashmonay*
Sara Bernice Head
Rachel Kate Henley
Christanna Quinby Honer
Jin Ho Jung
David Ryan Kelly
Sung Hwan Lee
Daniel Timothy Liguori
Yasmeen M. Mansour
Jordan Alyssa Mays
Brenda Kim McCauley
Bao Xuan Nguyen
Mckenzie Campbell Noblitt*
Nayan Raj Patel*
Cody Adam Rigsbee+
Leslie Anne Defenderfer Rognstad
Brent Robert Smith
Kyle Justin Smith
Uttara Thanigaivasan
Connie C. Wang*

Chemistry
Emily Nicole Cooper

Computer Science
Andrew Ryan Lewis

Environmental Sciences
Seon Hee Choi
Michael Anthony Esposito
Ashley Jade Mui*
Benjamin Hamilton Payne
Jozeph Lacy Pendleton++

Geological Sciences
Kate Josephine Baustian
Austin Reed Conklin
Rebekah Leigh Rhodes
Kelsey Lowe Rogers

Mathematical Decision Sciences
Yaxiong Du
Blaise Andrew Haubert
Yong Lu*

Mathematics
Jonathan Michael Reis
Jacob Christopher Ulirsch

Psychology
Richard Kenneth Baily
Daniel Francis Ferguson
Roberto Beaumont Rosario
Charlene Nicole Sampson
Rachel Ann Shepard
William Andrew Sheppard
Kristina Lin Voong
Kelly Amber Wice
Jingyi Yang

The Kenan-Flagler Business School

ESTABLISHED 1919
Dean James W. Dean Jr.

BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION
Nandar Aye
Thomas Hamilton Daniels
Morgan Collier Evans*
William Coleman Connell Hall
Kichul Kim*
Suji Kim**
Caroline Roberds La Roche
Maria Andrea Perdomo
William Abernathy Smith
Christopher David Sparks
Jaclyn Austin Wright**

The School of Dentistry
ESTABLISHED 1949
Dean Jane A. Weintraub

BACHELOR OF SCIENCE IN DENTAL HYGIENE
Hannah Mae Cranford
KwangMee NuDelman*

The School of Education
ESTABLISHED 1885
Dean G. Williamson McDiarmid

BACHELOR OF ARTS IN EDUCATION
Laura Lizabeth Freeman
Sarah Mahailey Moorefield
Rachel Kathleen Patty
Hanna Katherine Root*
Elaine Marie Townsend
Elizabeth Lee Wright

The School of Information and Library Science
ESTABLISHED 1931
Dean Gary Marchionini

BACHELOR OF SCIENCE IN INFORMATION SCIENCE
Lucas Joel Espinosa
Benito Luciano III
Jarett Anthony Roman
Phillip Richmond Transou

The School of Journalism and Mass Communication
ESTABLISHED 1924
Dean Susan Robinson King

BACHELOR OF ARTS IN JOURNALISM AND MASS COMMUNICATION
Abbie Rhian Bennett
Rachelle Elizabeth Branca*
Bryce Elliot Butner
Kathryn Nicole Charles
Christina Noel Cleveland
Brandon Jeffrey Curry
Hannah Martha Davis
William Randolph Futrell III
Andrew Brian Gaither*
Mark Robert Griffin
Lauren Marie Hafezi
Hanna Ji
Christopher Brent Lane
Ross Patrick Maloney*
Kelvin Moises Martinez
Caitlin Grace McGinnis
Lauren Elizabeth Miller
Abby Elise Moore
Elizabeth Mott
Timothy Benjamin Patron
Rachel Anne Pollard
Erin Sagen
Elizabeth Wangu*
Mary Katharine Withers
Victoria Dianne Yu

The School of Medicine
ESTABLISHED 1879
Dean William L. Roper

BACHELOR OF SCIENCE IN RADIOLOGIC SCIENCE
Carlos Rafael Contreras

The School of Nursing
ESTABLISHED 1950
Dean Kristen M. Swanson

BACHELOR OF SCIENCE IN NURSING
Philwyna Sarian Banks
Kendra G. Black
Meredith Coren Cole
Angie Farmer Hounsell
Ketan B. Ramji
Tasha Renea Salazar
Scott Edward Taylor*
Sonya Burns Ware
William Henry Wendt

The Gillings School of Global Public Health
ESTABLISHED 1939
Dean Barbara K. Rimer

BACHELOR OF SCIENCE IN PUBLIC HEALTH
Molly Katherine Gehring

* *Indicates degree with distinction based on grade point average.*

** *Indicates degree with highest distinction based on grade point average.*

\+ *Indicates Honors recipients.*

++ *Indicates Highest Honors recipients.*

THE UNIVERSITY SEAL

The University seal typically appears on diplomas and graduation materials, grade transcripts and documents that indicate accomplishment in or on behalf of the University. The first seal of the University of North Carolina, designed in 1790, showed the face of Apollo and his emblem, the rising sun, used to symbolize the dawn of higher education in the state. The words "sigul universitat carol septent" (Seal of the University of North Carolina) surrounded the drawing. A modification in 1895 added lighted torches of learning beside Apollo's profile. Two years later another alteration replaced Apollo's head with a shield on which the words Lux (light) and Libertas (liberty), separated by a white band running from the upper right to the lower left of the shield, appeared. In the 1940s, some observers mistakenly claimed the white stripe on the shield was a bend sinister, a heraldic code that was demeaning. In truth, the stripe was a bar sinister and merely denoted a second or later son. Still, the direction of the stripe was reversed, removing any question of stigma. Today's seal is the same as the 1897 version, except the stripe runs from the upper left to the lower right.

CERTIFICATES

August 2012

Undergraduate Certificates

The Gillings School of Global Public Health

ESTABLISHED 1939
Dean Barbara K. Rimer

CERTIFICATE IN COMMUNITY PREPAREDNESS AND DISASTER MANAGEMENT
Joseph Neill Howell Jr.
Jacazza L. Jones
Stephen Walter McKaig
Samantha Marie Migit
Alexandra Schaefer
Chadwick Adams Slaughter
Brian Scott Thomas
Stacey Diane Wiles

Postbaccalaureate Certificates

The Gillings School of Global Public Health

ESTABLISHED 1939
Dean Barbara K. Rimer

CERTIFICATE IN CORE PUBLIC HEALTH CONCEPTS
Susanna Kate Baker
Ulrike Karin Foley
Hongmei Gao
Kelli Morris Greene
Lindsay P. Prizer
Banalata Sen
Jonathan E. Stanford
John McKenzie Stogner
Christopher Gerard Van Hasselt
Sherrie Rackley Webb

CERTIFICATE IN FIELD EPIDEMIOLOGY
Gretchen Anne Cowman
Rebecca Horne
Molly Price Jarman
Jessica Maralyn Ruble
Priyadarshani Sokkalingam
Chrysa McDuffie Zachary

CERTIFICATE IN GLOBAL HEALTH
Natalie Whisenant Conner
Rebecca Ullman

CERTIFICATE IN MATERNAL AND CHILD HEALTH LEADERSHIP
Andrea Michelle Hernandez
Shaneka Thurman
Jessie Viders

CERTIFICATE IN OCCUPATIONAL HEALTH NURSING SPECIALTY
Daniel Kirk Huslage

COMMENCEMENT COMMITTEE

Ronald P. Strauss, *Chair*
Valerie Ashby
Bridget Baucom
Michael Bertucci
Angelyn (Angie) S. Bitting
Jeanette (Jan) Boxill
Nora Chan
Jill H. Crowder
Nancy K. Davis
Christopher Derickson
Douglas S. Dibbert
Joseph S. Ferrell
Jeffrey W. Fuchs
George B. Hare
Deborah L. Hawkins
L. Michael Johnson
James R. Kessler
Will Leimenstoll
Leslie S. Lerea
Laura Hayes Morgan
Rachel Myrick
Jackie Overton
Tim Palmer
Valerie A. Price
Erin C. Schuettpelz
William (Willie) E. Scroggs
Jane C. Smith
James I. Spurling
Frederick N. Stipe
Sidney W. Stone

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THE UNIVERSITY
of NORTH CAROLINA
at CHAPEL HILL

C378
UL

Corrected
version with
C J Davis listed
as the singer.
Jane

Comm

THE

NO LINA

AT CHAPEL HILL

Sunday, December Sixteenth

TWO THOUSAND TWELVE

Commencement 2012

THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

Sunday, December Sixteenth

TWO THOUSAND TWELVE

MESSAGE *from the* CHANCELLOR

Dear Graduates and Families:

The University of North Carolina is the oldest public institution of higher education in the country. It embodies the hopes for a democratic nation and the promise that education could make that democracy and the world better for future generations. We still believe in that promise at Carolina, and that is why we celebrate your graduation today.

The world has changed a lot since you entered UNC, and it needs you. Thanks to your Carolina education, you are ready for it. You have learned how to propose new ideas and have gained a worldview to understand their implications. You know the importance of extending opportunities to everyone.

On behalf of our faculty and staff, thank you to all the family members and friends who helped you through your educational journey. We know that you could not have done it without their love and support.

Welcome to the ranks of Tar Heel alumni who have gone out into the world and made a difference. We know you will, too. Carolina and Chapel Hill will be here for you. No matter where you go, you can count on our love and support. We can't wait to hear from you.

Hark the Sound!

H. Holden Thorp

HOLDEN THORP

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ALMA MATER

The words of "Hark the Sound," UNC-Chapel Hill's alma mater, were written in 1897 by William Starr Myers, a graduating senior. The Glee Club director asked Myers to put words to the tune "Amici," and the song was first performed on June 2, 1897, as part of the Glee Club's Commencement performance in Gerrard Hall.

Soon the song was almost forgotten. When a University quartet tried a few years later to remember the words, they could recollect only the first verse and the chorus of Myers' original version. Two members of the quartet, Charles S. Mangum and Charles T. Woollen, added two verses to the one they remembered. Mangum later became a professor in the School of Medicine, and Woollen worked as the University's business manager and comptroller.

HARK THE SOUND

Hark, the sound of Tar Heel voices
Ringing clear and true,
Singing Carolina's praises,
Shouting N.C.U.!

Hail to the brightest star of all!
Clear its radiance shine!
Carolina, priceless gem,
Receive all praises thine.

For Your Information

If you have any questions regarding Commencement activities, or in the event of an emergency, please contact an usher.

Open captioning of the ceremony will be available on the video screens in the Dean Smith Center.

This Commencement program is printed prior to administering final examinations. Therefore, including degree candidates' names in this program does not represent certification that candidates have satisfactorily completed degree requirements.

All diplomas are printed after graduation and are mailed to graduates. Every effort has been made to ensure the accuracy of this program's content. Any omissions or errors are unintentional.

The COMMENCEMENT PROGRAM

Concert by the University Band	Jeffrey W. Fuchs, *Director*
Academic Procession	The Faculty Marshal Valerie Ashby, *Gordon and Bowman Gray Distinguished Term Professor, Department of Chemistry* Brennan Fox, *The Chief Student Marshal*
	The Official Party
	The Faculty
	The Candidates for the Degrees of Doctor of Philosophy, Doctor of Education and Doctor of Public Health
	The Candidates for Master's and Professional Degrees
	The Candidates for Baccalaureate Degrees SENIOR CLASS MARSHALS WILL LEAD THE GROUPS TO THEIR SEATS.
Presiding	Holden Thorp, *Chancellor of the University of North Carolina at Chapel Hill*
National Anthem	Cornelius James David WITH THE ENTIRE ASSEMBLAGE
Recognition of Platform Party	Holden Thorp
Welcome Remarks	FOR THE UNIVERSITY OF NORTH CAROLINA William G. Daughtridge Jr., *UNC Board of Governors*
	FOR THE BOARD OF TRUSTEES OF THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL Wade Hampton Hargrove, *Chair*
	FOR THE GENERAL ALUMNI ASSOCIATION Eric Montross, *Chair, Board of Directors*
Introduction of Commencement Speaker	Tim Palmer, *President of the Class of 2013*
Commencement Address	Myron S. Cohen, *J. Herbert Bate Distinguished Professor of Medicine, Microbiology and Immunology and Public Health; Associate Vice Chancellor for Global Health; Director of the Institute for Global Health and Infectious Diseases*
Recognition of Doctoral Candidates	Leslie S. Lerea, *Associate Dean, Student Affairs, The Graduate School*
Introduction of Deans, Conferring of Degrees, and Chancellor's Charge to the Graduates	Holden Thorp
Ceremonial Recognition of the Graduates	Nora Chan, *Vice President of the Class of 2013*
"HARK THE SOUND"	Cornelius James David
Academic Recessional	*Please remain in place for the recessional of the Official Party, Faculty and Candidates for Degrees – led by the Faculty Marshal and the Senior Class Marshals.*

HOLDEN THORP

Chancellor

Holden Thorp took office as Carolina's 10th chancellor on July 1, 2008. He has invested three decades of his life at the University, starting as an undergraduate student who earned a bachelor of science degree with honors in 1986. Through his research, Thorp developed technology for electronic DNA chips and founded spin-off companies. He raised money for a science complex that has helped boost faculty research productivity, served as director of the Morehead Planetarium and Science Center, and was dean of the College of Arts and Sciences.

Thorp announced in September 2012 that he planned to step down, effective June 30, 2013. A Kenan Professor, he will resume his research and teaching in the chemistry department.

A North Carolina native, Thorp grew up in a Fayetteville family steeped in UNC traditions dating to the 1800s. When he graduated from Terry Sanford High School, the only college on his application list was Carolina. Attending a world-class research university — where the same people conduct research and teach — allowed Thorp to work in chemistry labs with top faculty and inspired him to become a professor. He pursued that dream at the California Institute of Technology, where he earned a doctorate in chemistry in 1989, and at Yale University for postgraduate work.

As chancellor, Thorp has been driven to ensure that UNC students today have the same life-changing opportunities that he did. He has pushed relentlessly to create an atmosphere in which students could be inspired to tackle the world's great problems. He launched "Innovate@Carolina: Important Ideas for a Better World," a roadmap for innovation in science, business, medicine, nonprofits and academia. The chancellor has pushed the campus to leverage scientific and medical research for society's good, and to advance work in the humanities that leads to greater understanding of the challenges the world faces.

Thorp serves on the National Advisory Council on Innovation and Entrepreneurship, which held its first national forum on campus in 2011. He co-authored "Engines of Innovation — The Entrepreneurial University in the 21st Century," a UNC Press book that makes the case for the pivotal role of research universities as agents of societal change. Royalties support innovation at UNC.

Thorp's priorities include protecting Carolina's legendary commitment to providing a high-quality education at an affordable price—core values that have kept the University and the chancellor in the spotlight as leaders during a national debate about the future of U.S. higher education. He was among a dozen higher education leaders invited to the White House to discuss with the president how campuses can become more affordable while producing more graduates. Thorp also serves on the national Commission on Higher Education Attainment, which is charting a course for improving college retention and attainment and, in turn, restoring the nation's higher education preeminence.

The University's recent successes under Thorp's leadership include enrolling a 2012 first-year class of nearly 4,000 outstanding students drawn from a record 29,000 applicants, up 24 percent over last year. Faculty research brought in $767 million during fiscal 2012 despite a challenging federal budget picture. The University rose to ninth from 16th among all research universities for federal funding ($545.99 million) devoted to research and development in fiscal 2010. That was the first time UNC-Chapel Hill had cracked the top 10. Alumni and friends stepped up their private giving in fiscal 2012 for the University's second best fundraising year ever, with $287 million in gifts — up 4 percent — at a time when the economy was still struggling. New commitments jumped by 8 percent to $331.4 million, and the number of donors rose to 78,000, 1,000 more than in 2011.

During Thorp's tenure, the University has successfully managed state budget cuts exceeding $238 million. A privately funded Bain & Company study has made operations more efficient and saved nearly $50 million annually in permanent state dollars. UNC-Chapel Hill also increased its percentage of successful faculty retentions to pre-2008 economic downturn levels as part of a proactive, aggressive strategy to keep Carolina's very best faculty in Chapel Hill.

Thorp's research expertise includes the electronic properties of DNA and RNA, and he co-founded Viamet Pharmaceuticals, which is developing drugs for prostate cancer and fungal infections.

An accomplished musician who plays jazz bass and keyboard, Thorp is married to Patti Worden Thorp, a Hope Mills native and UNC Greensboro graduate. Their children are John and Emma.

MYRON S. COHEN

The Commencement Speaker

Myron S. Cohen, the J. Herbert Bate Distinguished Professor of Medicine, Microbiology and Immunology and Public Health at UNC–Chapel Hill, is an acclaimed physician and researcher who has spent the last three decades studying the transmission and prevention of transmission of HIV/AIDS.

Cohen joined the UNC faculty in 1980 – the same year that AIDS was first identified – and was one of the first to recognize that any attempt to stem the AIDS epidemic would require an international program targeting improved care, treatment and research in resource-poor countries such as Malawi, China, the Democratic Republic of Congo, South Africa and Russia, as well as the United States.

Cohen's team of researchers at Carolina provided the scientific foundation for the Center for Disease Control's 2005 strategic plan for HIV prevention and led the National Institutes of Health to tap Carolina to help develop a safe and effective vaccine against HIV/AIDS.

As the architect and principal investigator of the multinational National Institutes of Health HIV Prevention Trials Network, Cohen was instrumental in showing that antiretroviral treatment prevents the sexual transmission of HIV-1. This work was recognized by Science Magazine as the "Breakthrough of the Year" in 2011.

In 2012, he was elected to the Institute of Medicine, one of the nation's highest honors for those in the fields of health and medicine.

Cohen has been a University faculty member for more than 30 years. His titles include associate vice chancellor for global health and director of the Institute for Global Health and Infectious Diseases. He earned his undergraduate degree from the University of Illinois, Urbana-Champaign, and his M.D. degree from Rush Medical College in Chicago.

Officers of the Class of 2012

Dean Drescher, *President*
Mohammad Saad, *Vice President*
Tori Stilwell, *Chief Marshal*
C. Hawkins '00, *Advisor*
Bianca Bell '11, *Annual Fund Liaison*

Officers of the Class of 2013

Tim Palmer, *President*
Nora Chan, *Vice President*
Brennan Fox, *Chief Marshal*
C. Hawkins '00, *Advisor*
Bianca Bell '11, *Annual Fund Liaison*

Marshals of the Class of 2012

Omar AbdelBaky
Carly Buch
Tricia Chesson
Jee Su Choi
Donald Cooley
Ben Cottingham
Martha Cox
Ryan Davis
Carley Dixon
Carly Elliott
Emily Farnell
Christina Foust
Megan Gyoerkoe
Taylor Haskin
Roxanne Hernandez
Taylor Howard
Ken Jameson
Rashi Kabra
Andres Lazarus
Coty Lee
Chris Lyle
Chad Manhertz
Atahar Mannan
Carter McCall
Noah Menaker
Addie Moody
Anna Mullen
Kene Onourah
Jaymee Patel
Burton Peebles
Holly Roberts
Diana Roycroft
Joel Semakula
Troy Smith
Will Taylor
Katie Terry
Stephanie Vaughn
Jeffrey Veale Jr.

Marshals of the Class of 2013

Kelly Blessing
Jerry Bowens
Sara Brady
Derek Buchanan
Lindsay Casper
Josh Clinard
Emily Ellis
Cheyenne English
Ashley Fox
Jordan Graves
Jane Hall
Abby Harrill
Janae Hinson
Colin Hodges
Mike Hourigan III
Laura Kessler
Sarah Mafe
Logan Mauney
Denzel McCollum
Maddy Merrill
Khadija Mohamed
Symone Morales
Thomas Mosley
Antoinette Newsome
Moni Oyedepo
Amber Pace
Nish Patel
Swati Rayasam
Ray Sawyer
Simon Scholl
Lauren Seiple
Kara Simpson
Kathryn Singsank
Justin Sodoma
Kimmy Summers
Emily Tracy
Becca Vinson
Jeff White

Graduate and Professional Student Federation Officers

Michael Bertucci, *President*
Julie Lauffenburger, *Vice President of Internal Affairs*
Kiran Bhardwaj, *Vice President of External Affairs*
Nicole Zane, *Chief of Staff*
JoEllen McBride, *Treasurer*
James Grinias, *Secretary*

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EX-OFFICIO
Chapel Hill, N.C.

CAROLINA ANNUAL FUND *and* 2012 SENIOR CAMPAIGN

Congratulations, graduates! There is no doubt that your experience at Carolina has included unparalleled opportunities and that your degree will open many doors for you in the future.

As Carolina students, you have been touched every day by private gifts to Carolina that maintain and enhance the University's tradition of excellence. Annual gifts improve the lives of students, faculty and staff. From scholarships to new research buildings and equipment, to access to incredible performances at Memorial Hall, to more than 6 million volumes in the libraries across campus, private gifts have impacted every aspect of campus life.

You're invited to support UNC-Chapel Hill through the Senior Campaign. You can make a gift to any part of the University that is meaningful to you — your major, a professorship, a student organization, scholarships and student aid, or campuswide programs. Or, to make an immediate difference where it is needed the most, consider supporting the Chancellor's Unrestricted Fund.

All gifts are included in the Senior Campaign and Annual Fund. Thank you to those who have already made your gift. **Give online at annualfund.unc.edu/gift or by mail to P.O. Box 309, Chapel Hill, N.C. 27514-0309.** For more information about the 2012 Senior Campaign, visit annualfund.unc.edu/students.

WELCOME YOUNG ALUMNI!

As you transition from students to alumni, we encourage you to keep up with young alumni events and Carolina news through the Carolina Annual Fund young alumni Facebook page (facebook.com/UNCYoungAlumni) and Twitter page (@UNCYoungAlumni). Through our social media efforts you can connect with fellow recent Carolina graduates in your area, participate in local events and social activities, and help Carolina stay strong by advocating philanthropy and support for the University among your peers. For more information about young alumni programs, visit youngalumni.unc.edu.

DEGREES *and* CERTIFICATES

The following is a list of all degrees and certificates available to students at the University of North Carolina at Chapel Hill

UNDERGRADUATE CERTIFICATES
Certificate in Community Preparedness and Disaster Management
Certificate in Cytotechnology
Certificate in Dental Hygiene
Certificate in Radiography
Certificate in Sports Communication

UNDERGRADUATE DEGREES
Bachelor of Arts with a major in:
African and Afro-American Studies; American Studies; Anthropology; Archaeology; Art History; Asian Studies; Biology; Chemistry; Classics; Communication Studies; Comparative Literature; Computer Science; Contemporary European Studies; Dramatic Art; Economics; English; Environmental Studies; Exercise and Sport Science; Geography; Geological Sciences; German; Germanic and Slavic Languages and Literatures; Global Studies; History; Interdisciplinary Studies; Latin American Studies; Linguistics; Management and Society; Mathematics; Music; Peace, War and Defense; Philosophy; Physics; Political Science; Psychology; Public Policy; Religious Studies; Romance Languages; Sociology; Studio Art; Women's and Gender Studies
Bachelor of Arts in Business Journalism
Bachelor of Arts in Education with a major in:
Child Development and Family Studies; Elementary Education; Middle Grades Education
Bachelor of Arts in Journalism and Mass Communication
Bachelor of Fine Arts
Bachelor of Music
Bachelor of Science with a major in:
Applied Science; Biology; Chemistry; Computer Science; Environmental Sciences; Geological Sciences; Human Biology; Mathematical Decision Sciences; Mathematics; Physics; Psychology
Bachelor of Science in Business Administration
Bachelor of Science in Clinical Laboratory Science
Bachelor of Science in Dental Hygiene
Bachelor of Science in Information Science
Bachelor of Science in Nursing
Bachelor of Science in Pharmaceutical Sciences
Bachelor of Science in Public Health with a major in:
Biostatistics; Environmental Health Sciences; Health Policy and Management; Nutrition
Bachelor of Science in Radiologic Science

POSTBACCALAUREATE AND POST-MASTER'S CERTIFICATES
Postbaccalaureate Certificate in Auditory Learning in Young Children
Postbaccalaureate Certificate in Business Journalism
Postbaccalaureate Certificate in Core Public Health Concepts
Postbaccalaureate Certificate in Field Epidemiology
Postbaccalaureate Certificate in Global Health
Postbaccalaureate Certificate in Maternal and Child Health Leadership
Postbaccalaureate Certificate in Occupational Health Nursing Specialty
Postbaccalaureate Certificate in Radiologist Assistant
Postbaccalaureate Certificate in Technology and Communication
Post-Master's Certificate in Information and Library Science
Post-Master's Certificate in Public Health Leadership

GRADUATE DEGREES
Master of Accounting
Master of Arts in the discipline of:
American Studies; Anthropology; Art History; Biology; Chemistry; Classics; Communication Studies; Comparative Literature; Ecology; Education; English; Exercise and Sport Science; Folklore; Geography; Geological Sciences; Germanic Languages; German Studies; History; Linguistics; Mass Communication; Mathematics; Musicology; Philosophy; Political Science; Psychology; Public Policy; Religious Studies; Romance Languages and Literatures; Russian and East European Studies; School Psychology; Slavic Languages and Literatures; Sociology
Master of Arts in Teaching
Master of Arts in Technology and Communication
Master of Business Administration
Master of Clinical Laboratory Science
Master of City and Regional Planning
Master of Education in the discipline of:
Education; School Counseling; School Psychology
Master of Fine Arts in the discipline of:
Dramatic Art; Studio Art
Master of Healthcare Administration
Master of Laws
Master of Physical Therapy
Master of Public Administration
Master of Public Health in the discipline of:
Biostatistics; Environmental Sciences and Engineering; Epidemiology; Health Behavior and Health Education; Health Policy and Management; Maternal and Child Health; Nutrition; Public Health Leadership
Master of Radiologic Science
Master of School Administration
Master of Science in the discipline of:
Biochemistry and Biophysics; Biology; Biomedical Engineering; Biostatistics; Cell and Developmental Biology; Cell and Molecular Physiology; Chemistry; Computer Science; Dental Hygiene Education; Ecology; Economics; Endodontics; Environmental Sciences and Engineering; Genetics and Molecular Biology;

Geological Sciences; Human Movement Science; Marine Sciences; Materials Science; Mathematics; Microbiology and Immunology; Neurobiology; Nutrition; Occupational Therapy; Operative Dentistry; Oral and Maxillofacial Pathology; Oral and Maxillofacial Radiology; Oral and Maxillofacial Surgery; Oral Biology; Orthodontics; Pathology; Pediatric Dentistry; Periodontology; Pharmaceutical Sciences; Pharmacology; Physics; Prosthodontics; Public Health Nursing; Rehabilitation Counseling and Psychology; Speech and Hearing Sciences; Statistics and Operations Research; Toxicology

Master of Science in Clinical Research
Master of Science in Disaster Management
Master of Science in Environmental Engineering
Master of Science in Information Science
Master of Science in Library Science
Master of Science in Management
Master of Science in Nursing
Master of Science in Public Health in the discipline of:
Biostatistics; Environmental Sciences and Engineering; Epidemiology; Health Behavior and Health Education; Health Policy and Management; Maternal and Child Health
Master of Science in Recreation Administration
Master of Social Work
Doctor of Philosophy in the discipline of:
American Studies; Anthropology; Art History; Biochemistry and Biophysics; Bioinformatics and Computational Biology; Biology; Biomedical Engineering; Biostatistics; Business Administration; Cell and Developmental Biology; Cell and Molecular Physiology; Chemistry; City and Regional Planning; Classics; Communication Studies; Comparative Literature; Computer Science; Ecology; Economics; Education; English; Environmental Sciences and Engineering; Epidemiology; Genetics and Molecular Biology; Geography; Geological Sciences; Germanic Languages; German Studies; Health Behavior and Health Education; Health Policy and Management; History; Human Movement Science; Information and Library Science; Marine Sciences; Mass Communication; Materials Science; Maternal and Child Health; Mathematics; Microbiology and Immunology; Musicology; Neurobiology; Nursing; Nutrition; Occupational Science; Oral Biology; Pathology; Pharmaceutical Sciences; Pharmacology; Philosophy; Physics; Political Science; Psychology; Public Policy; Religious Studies; Romance Languages and Literatures; School Psychology; Social Work; Sociology; Speech and Hearing Sciences; Statistics and Operations Research; Toxicology
Doctor of Public Health in the discipline of:
Biostatistics; Health Behavior and Health Education; Health Policy and Management; Maternal and Child Health; Nutrition

PROFESSIONAL DEGREES
Doctor of Audiology
Doctor of Dental Surgery
Doctor of Education in the discipline of:
Curriculum and Instruction; Educational Leadership
Doctor of Medicine
Doctor of Pharmacy
Doctor of Physical Therapy
Juris Doctor

THE BELL TOWER

The Morehead–Patterson Memorial Bell Tower was given to the University in 1931 by John Motley Morehead III and Rufus Lenoir Patterson. Its 14-bell carillon rings both manually and electronically to call students to class, provide twilight music and serenade the dispersing crowd after football games. Rising 172 feet, the tower is surrounded by a hedge and lawn designed by William C. Coker, botany professor and creator of the campus Arboretum.

CANDIDATES *for* GRADUATE DEGREES

December 2012 | *Degree candidates' names are followed by their area of major study, dissertation or project title and the name of their doctoral advisor.*

The Graduate School

ESTABLISHED 1903
Dean Steven W. Matson

DOCTOR OF PHILOSOPHY

Laurie Ann Abler, *Health Behavior and Health Education,* Developing a Measure of Hope for Exploring HIV-Related Risks among Young South African Women in a High Prevalence Setting. Professor Suzanne Maman.

Delia Nichole Acevedo, *Political Science,* Using the Five Factor Model of Personality Structure to Identify the Antecedents of Political Ambivalence. Professor Pamela J. Conover.

Cynthia Thornton Bacon, *Nursing,* Exploring Organizational Influences on Patient Symptom Management in Hospitals. Professor Barbara A. Mark.

Brenda C. Baletti, *Geography,* From Land to Territory: New Geographies of Amazonian Struggle. Professor Wendy Wolford.

Kevin Richard Blauth, *Neurobiology,* Fractalkine Induces the Expression of Intercellular Adhesion Molecule-1 on CD4+ T-Lymphocytes: Implications for the Immunopathogenesis of Multiple Sclerosis. Professor Silva Markovic-Plese.

Emily Wenink Bratton, *Epidemiology,* Clinical Management and Outcomes of Patients in the Duke Cryptococcosis Clinical Cohort, 1996–2009. Professor Charles Poole.

Sarah Mae Brosnan, *Chemistry,* The Development of Novel Polyesters as Unique Biomaterials. Professors Valerie S. Ashby and Joseph M. DeSimone.

Jarrett Grayson Camp, *Genetics and Molecular Biology,* The Impact of the Microbiota on Transcriptional Regulation in the Vertebrate Intestine. Professor John F. Rawls.

Alex Perrow Carll, *Environmental Sciences and Engineering,* The Influence of Autonomic Imbalance on Diesel Exhaust-Induced Cardiac Dysfunction in Heart Failure-Prone Rats. Professors Aimen K. Farraj and Avram Gold.

Alexis Wells Carpenter, *Chemistry,* Synthesis of Hybrid Inorganic/Organic Nitric Oxide-Releasing Silica Nanoparticles for Biomedical Applications. Professor Mark H. Schoenfisch.

Isaac Saibun Chan, *Genetics and Molecular Biology,* Hedgehog Signaling in Hepatocellular Carcinoma. Professors Anna Mae Diehl and Albert Baldwin.

Yu-Chi Chen, *Genetics and Molecular Biology,* Drosophila Neuroligin 2 Coordinates Pre- and Post-Synaptic Development, Differentiation and Neurotransmission. Professors Manzoor A. Bhat and Stephen T. Crews.

Zaozao Chen, *Cell and Developmental Biology,* Inhibition of Abl Family Kinases Produces a Profound Change in Cell Shape and Migration. Professor Ken Jacobson.

Catheryne Grayce Clouse, *Epidemiology,* Patient Retention at Key Milestones after HIV Diagnosis at a Primary Healthcare Clinic Offering Early Antiretroviral Therapy Initiation in Johannesburg, South Africa. Professor Audrey E. Pettifor.

Kimberly A. Coggan, *Microbiology and Immunology,* Characterization of a Type IV Pilus Biogenesis Operon in Pseudomonas Aeruginosa. Professor Matthew C. Wolfgang.

Siobhan Eileen Colgan, *Education,* The Role of Maternal Depression in Accessing Early Intervention Services for Children with Developmental Delay. Professors Julie L. Daniels and Rune J. Simeonsson.

Christopher John Currie, *Art History,* Art, Illusion and Social Mobility in 18th-Century France: Hyacinthe Rigaud and the Making of the Marquis de Gueidan. Professor Mary D. Sheriff.

Kelly Kent Davis, *Journalism and Mass Communication,* Public Faces: A Content Analysis of Gender, Ethnic and Racial Diversity on PBS. Professor Debashis Aikat.

Claire de la Varre, *Education,* An Exploration of Student and Teacher Social Presence in Asynchronous Discussion in an Online Advanced Placement Course for Rural High School Students. Professor Jill V. Hamm.

Chao Deng, *Statistics and Operations Research,* Optimal Design and Control of Finite-Population Queueing Systems. Professors Nilay Tanik Argon and Vidyadhar G. Kulkarni.

Vanessa Carolyn DeRocco, *Chemistry,* Biochemical and Single-Molecule Fluorescence Characterization of MUTS and MUTS Homolog Protein-DNA Interactions. Professor Dorothy A. Erie.

Crystal Heath Dodson, *Nursing,* Diffusion of Innovation: Knowledge and Attitudes of Oncology Nurses Regarding Pharmacogenomic Testing. Professor Marcia Van Riper.

Janet Michelle Doolittle, *Bioinformatics and Computational Biology,* Prediction of Host-Virus Interaction Networks. Professor Shawn Gomez.

Stuart Scott Dunn, *Chemistry,* Shape-Specific Hydrogel Nanoparticles with Defined Composition and Surface Properties for Gene Silencing. Professor Joseph M. DeSimone.

Jeffrey D. Edwards, *Social Work,* Juvenile Psychopathy and Traumatic Events among Incarcerated Adolescents. Professor Matthew O. Howard.

Jon K. Edwards, *Biomedical Engineering,* Robotic Endoscope. Professor Robert Q. Dennis.

Carolyn Martindale Edy, *Journalism and Mass Communication,* Conditions of Acceptance: The United States Military, The Press and the "Woman War Correspondent," 1846–1945. Professor Jean Folkerts.

Murat Es, *Geography,* Turkish-Dutch Mosques and the Construction of Transnational Spaces in Europe. Professor Banu Gokariksel.

Elizabeth Serex Evans, *Human Movement Science,* The Impact of Acute Aerobic Exercise on Natural Killer Cell, Catecholamine and Cortisol Responses in Breast Cancer Survivors. Professor Claudio L. Battaglini.

Alessandra Lynn Ferzoco, *Chemistry,* Understanding MS Approaches to Peptide Characterization. Professor Gary L. Glish.

Gina Kim Flakes, *Political Science,* Integration and Exchange Rate Theory: Empirically Evaluating the Predictability of Individual Preferences. Professor Thomas H. Oatley.

Kathleen Foody, *Religious Studies,* Thinking Islam: Islamic Scholars, Tradition and the State in the Islamic Republic of Iran. Professor Omid Safi.

Edward Gordon Franklin, *Chemistry,* Utilization of Long Columns Packed with Sub-2 um Particles Operated at High Pressures and Elevated Temperatures for High-Efficiency One-Dimensional Liquid Chromatographic Separations. Professor James W. Jorgenson.

Philip Charles Gach, *Chemistry,* Capturing, Analyzing and Collecting Adherent Cells Using Microarray Technologies. Professors Nancy L. Allbritton and Royce W. Murray.

Melita Marie Garza, *Journalism and Mass Communication,* They Came to Toil: News Frames of Wanted and Unwanted Mexicans in the Great Depression. Professor Barbara Friedman.

Deepak Gopalakrishna, *Genetics and Molecular Biology,* DiGeorge Syndrome Phenotypes Reflect Disrupted Interaction between Inductive Signals and 22q11 Genes. Professor Anthony Lamantia.

Melanie Louise Bain Gratton, *Statistics and Operations Research,* Algorithms for Trust-Region Subproblems with Linear Inequality Constraints. Professor Jon W. Tolle.

William Burton Grider, *Economics,* Gateway Theory in a Dynamic Context: The Effect of Past Substance Use on Current Demand. Professor Donna Gilleskie.

Jeanne Gunther, *Education,* Illuminating Teacher Change in the Context of a Technologically Mediated Professional Development Program and Early Reading Intervention: A Case Study. Professors Lynne Vernon-Feagans and Marnie Ginsberg.

Tracy Hadden-Loh, *City and Regional Planning,* Understanding Urban Development and Water Quality through Scenarios. Professor Yan Song.

Jeffrey J. Harden, *Political Science,* Multidimensional Democracy: The Supply and Demand of Political Representation. Professor Thomas M. Carsey.

Nathan Jay Harris, *Biology,* The Role of Rap1 in Drosophila Morphogenesis. Professor Mark Peifer.

Susan Wallace Haws, *Health Behavior and Health Education,* A Multilevel Study of Schools' Influences on Adolescent Substance Use. Professor Susan T. Ennett.

Abby Hoffman, *Education,* Teacher Attunement: Supporting Students' Peer Experiences in Early Elementary Classrooms. Professor Jill V. Hamm.

John R. Houser, *Physics and Astronomy,* A Systems Level Analysis of Transcriptional Regulation in the Yeast Mating Response. Professors Richard Superfine and Timothy Elston.

Rolien Hoyng, *Communication Studies,* Istanbul of Networks: Space, Technology and Governance. Professor Lawrence Grossberg.

Chia-Wen Hsu, *Pharmaceutical Sciences,* Development of Multiplexable Biosensors to Quantify Spatiotemporal Dynamics of Multiple Rho GTPases and Protein Kinases in the Same Living Cell. Professor Klaus M. Hahn.

Jing Hu, *Environmental Sciences and Engineering,* Effects of Bioremediation on Bioavailability and Genotoxicity of Contaminants in PAH-Contaminated Soil. Professor Michael D. Aitken.

Joel Wayne Hudley, *Geological Sciences,* Reconstructing Modern and Pliocene (c. 5.4–2.4 Ma) Decadal Climate Variations in the Paleoenvironments of the Middle Atlantic Bight Using Isotope and Increment Sclerochronology. Professor Donna M. Surge.

Laili Irani, *Maternal and Child Health,* Family Planning in Urban Kenya: An Examination of the Factors Affecting Contraceptive Use. Professor Ilene S. Speizer.

Robert Brandon Irvin, *Psychology,* Emotional and Contextual Influences in an Altruistic Decision-Making Task. Professor Joseph Lowman.

Cassandra Baheeya Jabara, *Biology,* Using Deep Sequencing with a Primer ID to Resolve the Structure of Viral Populations and Reveal Pre-Existing Drug Resistance Mutations in the HIV and HCV Protease Genes. Professors Corbin D. Jones and Ronald Swanstrom.

Karen Elizabeth Jakub, *Nursing,* Long-Term Adjustment and Reimplantation Surgery in Patients with Implantable Cardioverter Defibrillators. Professor Margarete Sandelowski.

Shannon Zenia Jones, *Toxicology,* The Identification of Novel Mechanisms to Regulate B Cell Responses during Adaptive Immunity. Professor Barbara J. Vilen.

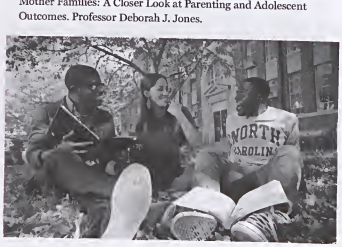
Ja Hyun Kang, *Nursing,* Prevention of Healthcare-Associated Infections in U.S. Hospital Settings. Professor Barbara Mark.

Dio Kavalieratos, *Health Policy and Management,* Exploring the Role of Palliative Care in Heart Failure: Referral Barriers, Care Gaps, and Quality of Care. Professor Morris Weinberger.

Yeuseung Kim, *Journalism and Mass Communication,* Effects of Source of Customized Recommendations, Type of Product, and Amount of Choice on Consumers' Attitudes. Professor Sriram Kalyanaraman.

Yuri Kim, *Geography,* Water Balance Change Under Climate and Landuse/Landcover Variability in the North Carolina Piedmont. Professor Lawrence E. Band.

Carlye Yates Kincaid, *Psychology,* Risk and Resilience among Single Mother Families: A Closer Look at Parenting and Adolescent Outcomes. Professor Deborah J. Jones.



Jessica Klusek, *Speech and Hearing Sciences,* Pragmatic Language in Autism and Fragile X Syndrome: Links with Physiological Arousal and Anxiety. Professor Molly Losh.

Bethany Ellen Kok, *Psychology,* Testing a Socio-Autonomic Spiral Model of Social Connection. Professor Barbara L. Fredrickson.

Huai-Ping Lee, *Computer Science,* Simulation-Based Joint Estimation of Body Deformation and Elasticity Parameters for Medical Image Analysis. Professor Ming C. Lin.

Kim Maureen Lichtveld, *Environmental Sciences and Engineering,* Using in Vitro Cultured Lung Cell Exposure Systems to Compare the Toxicity of Fresh and Aged Diesel Exhaust Utilizing an Outdoor Smog Chamber. Professors Harvey Jeffries and Kenneth G. Sexton.

Yang Liu, *Pharmaceutical Sciences,* Pharmacokinetics and Biodistribution of LCP Nanoparticles. Professor Leaf Huang.

Dustin Marsh Long, *Biostatistics,* Causal Inference and Principal Stratification: Competing Risks, Bounds and Surrogates. Professor Michael G. Hudgens.

Justin Thomas Low, *Biochemistry and Biophysics,* Structural and Therapeutic Insights from the HIV-1 RNA Genome. Professor Kevin M. Weeks.

Jianzhe Luo, *Statistics and Operations Research,* Queueing Approaches to Appointment System Design. Professors Vidyadhar G. Kulkarni and Serhan Ziya.

Lindsey Ward Lyles, *City and Regional Planning,* Stakeholder Network Influences on Local-Level Hazard Mitigation Planning Outputs. Professor Philip R. Berke.

Jennifer Marie Lynn, *History,* Contested Femininities: Representations of Modern Women in the German Illustrated Press, 1020–1045. Professor Karen Hagemann.

Bonnie Anne Lyon, *Environmental Sciences and Engineering,* Impact of UV Treatment on Disinfection Byproduct Precursors and Subsequent Byproduct Formation from Chlorine and Chloramine. Professor Howard S. Weinberg.

Laura Haak Marcial, *Information and Library Science,* Moving beyond the Desktop: Searching for Information with Limited Display Size. Professor Bradley M. Hemminger.

Helen Camp Matthews, *Romance Languages,* Sugar Turns to Cotton: French Retellings of the Haitian Revolutions and the American Civil War. Professor Dominique Fisher.

Margaret Elizabeth McCormick, *Cell and Molecular Physiology,* The Adhesion Molecule PECAM-1 Directs Endothelial Nitric Oxide Synthase Activity and Cardiac Function to Regulate Cardiovascular Homeostasis. Professor Carol Otey.

Robert McKeever, *Journalism and Mass Communication,* Vicarious Experience: The Effects of Message-Induced Empathy on Attitudes toward Individuals with Severe Depression. Professor Daniel Riffe.

Jessica Tsesha Meed, *Health Policy and Management,* Home Front — Exploring Associations between Household Structure, Coping Strategies and Behavioral Health Visits within the Military. Professor James V. Porto.

Lucia Ingrid Mendez, *Speech and Hearing Sciences,* A Culturally and Linguistically Responsive Vocabulary Approach for Young Latino Dual Language Learners. Professors Elizabeth Crais and Dina C. Castro.

Alicia Ann Midland, *Bioinformatics and Computational Biology,* Characterization of the Breast Cancer Kinome. Professors Shawn M. Gomez and Gary L. Johnson.

Stephen Milder, *History,* "Today the Fish, Tomorrow Us": Anti-Nuclear Activism in the Rhine Valley and Beyond, 1970–1979. Professor Konrad H. Jarausch.

David L. Millman, *Computer Science,* Degree-Driven Design of Geometric Algorithms for Point Location, Proximity and Volume Calculation. Professor Jack Snoeyink.

Alex Fuller Mills, *Statistics and Operations Research,* Patient Prioritization and Resource Allocation in Mass Casualty Incidents. Professor Nilay Tanik Argon and Serhan Ziya.

Shalini Minocha, *Pharmaceutical Sciences,* Investigations into the Mechanisms of Cell Death: The Common Link Between Anticancer Nanotherapeutics and Nanotoxicology. Professor Russell J. Mumper.

Ashley Isaac Naimi, *Epidemiology,* Causal Inference in Occupational Epidemiology: Asbestos, Lung Cancer Mortality and the Healthy Worker Survivor Effect. Professor Stephen R. Cole.

Scott Philip Nichols, *Chemistry,* Tissue Integration and Antibacterial Effects of Surface-Derived Nitric-Oxide Release. Professor Mark H. Schoenfisch.

Christopher Robert Noel, *Microbiology and Immunology,* The FhaB Prodomain of Bordetella Affects the Biogenesis of Filamentous Hemagglutinin, Influencing Bordetella Virulence. Professor Peggy A. Cotter.

Joel Pereira, *Mathematics,* On the Cohen-Macaulay Property of Quotients of Conical Algebras by Monomial Ideals. Professor James N. Damon.

Kimberly Ann Peters, *Biology,* The Role of Canonical and Non-Canonical Regulators of Heterotrimeric G Protein Signaling During Drosophila Melanogaster Morphogenesis. Professor Stephen L. Rogers.

Elizabeth Grace Pollom, *Biochemistry and Biophysics,* Structure and Function of Lentiviral Genomic and Messenger RNA. Professor Ronald Swanstrom.

Fernanda Costa de Queirós, *Maternal and Child Health,* The Effects of Early Life Disabilities on Human Capital Accumulation in Young Adulthood. Professors Carolyn T. Halpern and Anita M. Farel.

Alexander Nathan Raines, *Neurobiology,* Myosin-X in Neuronal Development. Professor Richard E. Cheney.

William Charles Rice, *Physics and Astronomy,* Magnetotransport Studies of Metal-Organic Molecule-Metal Structures: Electronic Transport Through Molecular Films of Alkanedithiols and Valence Tautomers. Professor Frank Tsui.

THE CHANCELLOR'S MEDAL

The chancellor's medal, an emblem of the office of chancellor, is worn during the University's ceremonial occasions. The sterling silver disk, which is three inches in diameter and seven ounces Troy weight, was given to the University by John Sanders, professor emeritus and former director of the UNC Institute of Government, and his wife, Ann Beal Sanders. Modeled by sculptor Pete Hinton and bearing the University seal, it was first worn by Chancellor Paul Hardin during the 1994 University Day convocation.

THE FIRST CAROLINA DIPLOMA

In September 1796 Carolina student Davie Gillespie began working with a group of men to determine the Southern boundary of the United States. His instructors gave Gillespie a document to carry as proof that he had been a student at the University of North Carolina. The document, now in the Library of Congress, was signed by his professors and ended with the statement, "We thought it proper to give him this certificate."

The University's first graduating class in 1798 included Hinton James, the first student to enroll. Seven men received the first documents that by today's standards can be called UNC-Chapel Hill diplomas. One of the original diplomas is in the Southern Historical Collection in Wilson Library.

During the University's early years, commencement at Carolina was a time for examinations and promotions to higher classes. There was a commencement, but no degrees awarded and no graduation.

Thorfinn Riday, *Neurobiology,* Altered Visual Cortical Plasticity and Nigral-Limbic Dopamine Release in Angelman Syndrome Mice. Professor Benjamin Philpot.

Erin MacKenzie Romes, *Biochemistry and Biophysics,* Structural and Biochemical Analysis of Dynein Light Chain-Mediated Homodimerization of Cytoskeletal and Nuclear Pore Proteins. Professor Kevin C. Slep.

Nora E. Rosenberg, *Epidemiology,* Assessing the Prevention Impact of HIV Counseling and Testing in the South African Context. Professor Audrey E. Pettifor.

Allison Elizabeth Rovny, *Political Science,* New Social Risks, Social Policies and Dualization in the Contemporary Welfare State. Professor John D. Stephens.

Marta Sánchez, *Education,* Por Imaginacion y Amor – El Permanecer del Padre Mexicano a Distancia. For Imagination and Love – The Permanence of the Mexican Father Who Fathers at a Distance. Professor George W. Noblit.

Leah Hope Schinasi, *Epidemiology,* Environmental, Occupational and Medical Exposures Associated with Methicillin-Resistant Staphylococcus Aureus Nasal Carriage in Patients Admitted to an Eastern North Carolina Hospital. Professor Steve Wing.

Ashley Land Schoenfisch, *Epidemiology,* The Injury Experience of Union Drywall Carpenters in Washington State, 1989–2008. Professor Steve Marshall.

Naman Kirit Shah, *Epidemiology,* Reducing Malaria Transmission: The Epidemiology and Treatment of Plasmodium Falciparum Gametocytemia. Professor Steven R. Meshnick.

Junko Shimazoe, *Sociology,* The Power of Forgotten Opinions: Why an Organization Chooses Inaction over the Public's Safety. Professor Howard E. Aldrich.

Michael Brady Smith, *History,* Restoring Our Commercial Rights: Silk, Nationalism, Commercial Policy and the Direct Trade Movement in Meiji Japan, 1868–1890. Professor W. Miles Fletcher.

Jamie Robert Snape, *Computer Science,* Smooth and Collision-Free Navigation for Multiple Mobile Robots and Video Game Characters. Professor Dinesh Manocha.

Sarah Jeanne Stein, *Biology,* The Role of NF-kB in BCR-ABL-Driven Oncogenic Transformation and in Hematopoiesis. Professor Albert S. Baldwin.

Dori M. Steinberg, *Nutrition,* Effect of Daily Self-Weighing on Weight Loss in Adults. Professor Deborah F. Tate.

Jordan Thomas Stobaugh, *Chemistry,* Strategies for Differential Proteomic Analysis by Liquid Chromatography-Mass Spectrometry. Professor James W. Jorgenson.

Daniel Timothy Sweet, *Genetics and Molecular Biology,* The Adaptor Protein SHC is a Critical Regulator of Angiogenic and Shear Stress Signaling in Endothelial Cells. Professor Eleni Tzima.

Ghadeer Thalji, *Dentistry,* Oral Biology; Genome-Wide Assessment of Early Osseointegration in Implant-Adherent Cells. Professor Lyndon F. Cooper.

Jeromy Tompkins, *Physics and Astronomy,* Polarized Photofission Fragment Angular Distributions of 232Th and 238U. Professor Hugon J. Karwowski.

Rachana Rao Umashankar, *Anthropology,* Defending Sufism, Defining Islam: Asserting Islamic Identity in India. Professors James L. Peacock and Lauren G. Leve.

Rachel Dyane Upton, *Psychology,* Examining Characteristics, Motivations and Career Goals of Black Students Who Attend Historically Black Colleges and Law Schools. Professor Abagail T. Panter.

Carmina G. Valle, *Nutrition,* Examining the Use of Online Social Networking to Improve Physical Activity Behaviors among Young Adult Cancer Survivors. Professors Deborah F. Tate and Marci K. Campbell.

Nicole Marie Vincent Jordan, *Pharmacology,* Epigenetic Regulation of Epithelial-Mesenchymal Transition in Epithelial Stem Cells and Triple Negative Breast Cancer. Professor Gary L. Johnson.

Ashley Rae Ward, *Geography,* Echoes in a Changing Urban Landscape: Memories and Place Identity in Durham, North Carolina. Professor Stephen Birdsall.

Heather Wasser, *Nutrition,* Non-Maternal Involvement in Feeding and the Development of Obesogenic Diets among Infants and Toddlers. Professor Margaret E. Bentley.

Stephanie Elaine Watkins, *Epidemiology,* Interventional Physical and Occupational Therapy Services and Motor Coordination Among Low Birth Weight Infants. Professor Julie Daniels.

Buddy Allan Whitman, *Neurobiology,* Neuroimmune Consequences of Chronic Alcohol Exposure: Relationship to Stress. Professor George R. Breese.

David Christopher Williard, *History,* "What a Fall Was There — My Country Ruined!": Confederate Soldiers and Southern Society, 1861–1880. Professor William L. Barney.

Leah Anne Wingard, *Chemistry,* Accessing Intermediate and High Oxidation States with Tungsten and Iridium Pincer Complexes. Professor Joseph L. Templeton.

Todd D. Woodruff, *Business Administration,* Goal Influence in Organizational Identification and Post-Choice Behavior. Professor Jan Benedict Steenkamp.

Holly Worthen, *Geography,* The Presence of Absence: Indigenous Migration, a Ghost Town and the Remaking of Gendered Communal Systems in Oaxaca, Mexico. Professor Wendy W. Wolford.

DOCTOR OF PUBLIC HEALTH

Emily Anne Colby, *Biostatistics,* Methods for Population Pharmacokinetics and Pharmacodynamics. Professors Eric Bair and Gary Koch.

Sarthak Das, *Health Policy and Management,* Retention of Patients on Antiretroviral Therapy in the Highlands of Papua New Guinea. Professor Sandra Greene.

Nnekae Ijoma Emenyonu, *Health Policy and Management,* Barriers to HIV Care in Rural Uganda. Professor Sandra Greene.

Gina Suzanne Ogilvie, *Health Policy and Management,* Intention of Women to Receive Cervical Cancer Screening in the Era of Human Papillomarvirus Testing. Professor Suzanne Hobbs.

Jennifer Platt, *Health Policy and Management,* Institutionalizing Sanitation: A Mixed Methods Assessment of the Role of the Health Ministry in Developing Countries. Professor Sandra Greene.

John Michael Wiesman, *Health Policy and Management,* Succession Planning and Management Practice in Washington State Local Public Health Agencies: The Current Situation and Recommendations for Better Practice. Professor Edward L. Baker Jr.

Yue Zhao, *Biostatistics,* Sensitivity Analyses of Time-to-Event Data with Possibly Informative Censoring for Confirmatory Clinical Trials. Professors Gary G. Koch and Amy H. Herring.

The School of Education

ESTABLISHED 1885

Dean G. Williamson McDiarmid

DOCTOR OF EDUCATION

Marguerita Best, *Educational Leadership,* Assistant Principals and Reform: A Socialization Paradox? Professor Catherine Marshall.

Pamela Renee Hill-Cunningham, *Curriculum and Instruction,* Testing Technology: Administering Mathematics Assessments in Kindergarten and First Grade. Professors Susan Friel and Barbara D. Day.

Derrick Jordan, *Educational Leadership,* Looking Beyond School Walls: Examining the Impact of Superintendent Longevity on Teachers' Perceptions of their Working Conditions. Professor Fenwick English.

Jacqueline Jordan, *Educational Leadership,* Why Can't We Have It All? The Conflict between the Principalship and Motherhood. Professor Catherine Marshall

Mia Murphy, *Educational Leadership,* The Self-Perception of Leadership Efficacy of Alternative School Principals and Its Relationship to Student Achievement in the Era of Reform and Accountability. Professor Fenwick English.

Eva Phillips, *Curriculum and Instruction,* An Examination of the Relationship between Kindergarten Children's Access to Developmentally Appropriate Practices and Their Success on Measures of Literacy. Professor Sharon Ritchie.

Matthew Proto, *Educational Leadership,* The Effect of Structural Adaptation on School Turnaround. Professor Kathleen Brown.

Bradford Walston, *Educational Leadership,* The Effect of Adaptive Leadership on School Turnaround. Professor Kathleen Brown.

TAR HEELS

The University uses the nickname "Tar Heels," and the entire state does as well. One version of the nickname's origin has the name first being applied to North Carolinians during the Civil War. One record talks of a battle in Virginia, where their supporting column retreated, but North Carolina troops stood alone to fight successfully. The victorious troops were asked in a condescending tone by some Virginians, who had retreated, "Any more tar down in the Old North State, boys?" The response came quickly: "No, not a bit; old Jeff's bought it all up." The Virginians asked: "Is that so? What is he going to do with it?" The reply: "He is going to put it on you'ns heels to make you stick better in the next fight."

CANDIDATES *for* POSTBACCALAUREATE PROFESSIONAL DEGREES

December 2012

The School of Law

ESTABLISHED 1843

Dean John Charles Boger

JURIS DOCTOR

Justin M. Angell
Kristin L. Butler
Kandace R. Davis
Rachel E. Faultersack
Rachel R. Hall
William D. Kirby
Hector L. Melecio
Sofia N. Mochegova
Lauren Elizabeth Nelson
Hillary Smith

The School of Medicine

ESTABLISHED 1879

Dean William L. Roper

DOCTOR OF MEDICINE

Carrie A. Baldwin
Eric S. Burgon
Lila Farrag
Patrick Knox McNeillie
Russell E. Warburton

THE OLD WELL

At the heart of the campus stands the visual symbol of the University of North Carolina at Chapel Hill. For many years the Old Well served as the sole water supply for Old East and Old West dormitories. In 1897, the well was given its present decorative form at the direction of President Edwin A. Alderman, who described his beautification project as largely derived from the Temple of Love in the Garden of Versailles. In 1954, the well was given added beauty with brick walks, plantings and benches. Legend holds that students can bring good luck with a drink from the Old Well on the first day of classes.

A MESSAGE *to* CAROLINA'S NEWEST ALUMNI

Congratulations! You are now graduates of the University of North Carolina at Chapel Hill. Let your General Alumni Association help you make a seamless transition from students to alumni — no matter where you find yourselves after graduation. Visit alumni.unc.edu/youngalumni.

GETTING STARTED

Don't miss out on special invitations and services. Call (877) 377-7125 or visit alumni.unc.edu/update to keep your official University record updated. Jump start your network with Carolina alumni — join the GAA's groups on Facebook and LinkedIn.

ALUMNI CAREER SERVICES

Networking is the most effective approach to finding a job. The GAA can connect you with more than 7,000 alumni volunteers in our Alumni Advisor Network who can help you explore career options.

GAA members from the Class of 2012 have full access (phone, email or in person) to the GAA's certified career coach for one year following graduation. If you're thinking about grad school, GAA members also receive discounts on Kaplan prep courses.

FINDING OTHER TAR HEELS IN YOUR AREA

- Local Carolina Clubs can be found in nearly 100 cities around the globe. Socialize, network, cheer on the Heels and continue that spirit of Tar Heel service within your community.
- The GAA's Online Alumni Directory can help you develop a network like no other. The directory includes nearly 270,000 former Carolina students.

TRUSTED INFORMATION SOURCE

The "Carolina Alumni Review," the "Out of the Blue" e-newsletter, the GAA's Twitter feed and alumni.unc.edu can keep you updated on the University's achievements and challenges as well as what's going on in Chapel Hill.

Congratulations again. We hope you'll choose to join the nearly 70,000 GAA members who remain connected and help serve Carolina and our students — past, present and future. The GAA offers new grads a one-year membership for only $25 — a $20 savings off our annual dues rate. Or save $50 on life membership — only $28.25/month for 24 months.

For more information on how the Association serves new graduates, please call Brandon Copeland '12 or Diana Koonce '02 at (800) 962-0742 or email membership@unc.edu. Visit us on the Web at alumni.unc.edu.

CANDIDATES *for* GRADUATE DEGREES *and* PROFESSIONAL GRADUATE DEGREES

December 2012

The Graduate School

ESTABLISHED 1903
Dean Steven W. Matson

MASTER OF ARTS

Anthropology
Brittany Glarrow Chamberlain

Education
Lindsay Francine Goldberg
Abram Justin Kline
Josmell J. Perez

English
Jerrod Nathan Rosenbaum

Exercise and Sport Science
Nathaniel Thomas Berry
Justin Freeman

History
Anndal Grace Narayanan

Mass Communication
Sarah Elizabeth Davidson-Palmer
Vanessa Ruth Patchett
Carol Louise Perry

Musicology
Karen Evelyn Atkins

Political Science
Rahim Shiraz Mohamed

Psychology
Sierra Allegra Bainter
Zane Edward Blanton
Jennifer Lynn Green
Renske Suzanne Hoedemaker
Lee Wade Hutson

Romance Languages and Literatures
Katherine Elizabeth Karcher
John Samuel Krieg

Russian and East European Studies
Nicholas Constantine Kanios
Anna Kirey
Hannah Justine Marchman

Sociology
Joseph R. Bongiovi
Christopher Shane Elliott
Sarah Nicole Gaby
Brandon Gorman
Jonathan Horowitz
Maria Del Carmen Huerta-Bapat
Mark Douglas Noble
Niobra Monique Samuel-Peterson
Philip Edward Weickert

MASTER OF CITY AND REGIONAL PLANNING

Andrew David Stevenson

MASTER OF SCIENCE

Biomedical Engineering
Leslie Baggesen
Steven Glenn Feingold
Nicholas George Hallfors
Jordan Walter Hutchinson
Roger Chai Yu

Biostatistics
Yu Deng
Ellen L. Mir
Christel N. Rushing

Chemistry
Tyler David Jones
Ryan Patrick Vary

Computer Science
Oluwafemi Sharon Alabi
Wei Cheng
Sajal Dash
Jared Scott Heinly
Michael K. Muraya
Kun Peng
Anant Pradhan
Sean Sanders
Vishal Verma
Xiaojie Zhao
Enliang Zheng

Economics
Brian Patterson Goldberger
Brian Sullivan
Matthew Taylor Horne

Environmental Sciences and Engineering
Ramon De Alatorre
Robert Warren Albury
Sarah Marie Hatcher
Rebecca Milsk
Esteban Adrian Oyarzabal
Lisa Singleton-Baldrey

Geological Sciences
George H. Allen

Marine Science
Sungduk Yu

Physics
Kathleen Donnally Eckert
Robert M. Judith
Ava Glenn Pope
Gongting Wu

Statistics and Operations Research
Lu Huang
Qianwen Liu
Ovunc Yilmaz

The Kenan–Flagler Business School

ESTABLISHED 1919
Dean James W. Dean Jr.

MASTER OF BUSINESS ADMINISTRATION

Srinivas Adusumilli
Ryan Patrick Allen
Shareef F. Alshinnawi
Thomas David Arman
Robert Ballew
Benjamin Joseph Barish
Nicholas Joseph Bender
Mayura Bhandarkar
John Alexander Bitsas
Karunakar Bojjireddy
David Buckley
Mahbub Islam Chowdhury
Christopher Ryan Church
Virginia Beaty Cleary
Maria de los Angeles Craig
Drew Joseph Crawford
Robert Houston Davenport III
David Davila
Victor DeMarco
Todd Michael Driscoll
Jeffrey Alvin Duncan
Kevin Michael Dzielecki
Jamie Wayne Earp
Eric M. Eaton
Brian Nelson Ember
Billy R. Ezzell III
Stephen William Farrell
Maximillian Allen Fitch
John Michael Flagg
Andres Forero
Elizabeth Gribble Forshay
Philip Mark Garber
Wilkes Jackson Graham
Vikas Grover
Gerardo Antonio Guifarro
Joseph Gyamfi
Simone Diana Hamlett
John David Heilmann
Christopher A. Huguelet
Morton Oliver Janney
Robert Scott Jeske
Hitendra Sinh Jethwa
Kristine Constance Kelleher
Michael Randall Kertcher
Nathan Michael Kilburn
Jin Sam Kim
Adam Burton King
Amber Starbuck Kirkman
Bruce Allen Kohn

COMMENCEMENT MUSIC

The University's beloved alma mater, "Hark the Sound," evokes the feelings of loyalty and friendship that students, alumni and true blue Tar Heels everywhere have for Carolina. The orchestral marches that accompany the commencement processional are equally memorable for their power and splendor. They are truly fitting musical celebrations of the talent and achievements of UNC-Chapel Hill's visiting dignitaries, faculty and graduates.

During today's commencement ceremony, members of the academic processional will be welcomed by the fanfare brass, woodwinds and drums of Nikolai Rimsky-Korsakov's "Procession of the Nobles" and Richard Strauss' "Konigsmarsch." Rimsky-Korsakov wrote his majestic march to open the second act of the opera-ballet "Mlada," which premiered in Saint Petersburg, Russia, in 1892. Strauss premiered the flourishing "Konigsmarsch" at a palace concert in Berlin in 1907.

The new graduates will exit the ceremony while hearing familiar Carolina melodies in "Tar Heel Rhapsody," a composition written specifically for the University that features its school songs.

William Robert LaFontaine
James Franklin Logan
David Harbison Long Jr.
Matthew Malette Lonnee
Sharon Lycans
Anthony J. Manganaro
Vinay Manhass
John William Matthews
John L. McCormick
Jennifer Fereshteh Mehram
Anastasia Melchina
Katherine Elise Millner
David Charles Moody
Sean Moschberger
Alexander Wade Ogle
Aliou D. Ousmanou
Anna Christina Penner
Nikhil Phansalkar
Vinod Prasanna
Jovani Price
Sandeep Rajan
Scott W. Ranby
Spenta Michael Rawaan
Christopher Scott Reavis
Eugene Edwin Record III
Erik R. Rexo
John C. Richter
Derek Damone Ross
Dinesh Sadhvani
Shaun P. Sanders
Rodney Parthemer Scott
Hari Shankar
Amith Padmanabha Shenoy
Tyler Shields
Sean Michael Siler
Eric James Skow
Emily Williams Smith
Melissa Rae Sowry
Erika Hope Stinson
Joel Edward Stinson
Wei Min Eugene Tay
Kern Ryan Taylor
Tonya Simpson Terry
Brian N. Top
Elizabeth Ann Wicker
Travis Scott Wilds
Simon Wilson
Andrew Winzenz
Julie C. Wix

The School of Education

ESTABLISHED 1885
Dean G. Williamson McDiarmid

MASTER OF EDUCATION
Rachel Sima Bachenheimer
Jennifer Rae Bonilla
Christine Ann Daughtrey
Jessica Marie Page

The School of Government

ESTABLISHED 2001
Dean Michael R. Smith

MASTER OF PUBLIC ADMINISTRATION
Erik Brandon Osborne
Andrew David Stevenson

The School of Information and Library Science

ESTABLISHED 1931
Dean Gary Marchionini

MASTER OF SCIENCE IN INFORMATION SCIENCE
Robert Lee Cooper
Joshua David Hager
Michelle M. Lopez
Tian Sun

MASTER OF SCIENCE IN LIBRARY SCIENCE
Anne Rachelle Barrett
Jacqueline Emily Chapman
Carolyn Marie Chesarino
Martin Joseph Gengenbach
Kamila Lindsay LaBerge
Sarah Kalikman Lippincott
William Harrison Midgley
Brendan Christopher O'Connell
Jesse Morgan Savage
Lisa Christine Simmons
Melanie Susan Sorrell
Charles Marshall Stroscio
Alexandra Simms Toomey
Meghan Mary Webb

The School of Medicine

ESTABLISHED 1879
Dean William L. Roper

DOCTOR OF PHYSICAL THERAPY
Rachel Jeanne Slife

MASTER OF MOLECULAR DIAGNOSTIC SCIENCE
Lisa Kay Cremeans
Manyu Li
Dev Bharat Patel
Jose Constantino Sevilla
Anurekha Vedaiyan

MASTER OF RADIOLOGIC SCIENCE
Craig D. Byer
Christen M. Crane-Amores
Elvin J. Cuevas
Elizabeth M. Eslich
Lauren Peele Hurdle
Courtney Lea Jadidian
Lenvil Lance Jones
Jason P. Leymeister
Kamau Jaja Nkenge
Lauren E. Ortiz
Kristin Pahl
Amber E. Price-Williams
Cephus Simmons

The School of Nursing

ESTABLISHED 1950
Dean Kristen M. Swanson

MASTER OF SCIENCE IN NURSING
Stacy Lee Carey
Elizabeth Rourke Chapman
Ronda L. Decker
Tamryn LaShea Fowler
Brenda Marie Hallett
Teresa C. Hulseman
Kristin Renee Lauer
Stephanie Nicole Roberts
Bonnie Klutz Sammons
Sarah Serrano
Barbara Maria Buerke Stephen
Necole Antoinette Tibolla

The Gillings School of Global Public Health

ESTABLISHED 1939
Dean Barbara K. Rimer

MASTER OF HEALTHCARE ADMINISTRATION
Susmita Chavala
William Howard Holding
Emran K. Huda
William Brian Hunter
Eric Wayne Jefferson
Matthew Jonathan Kelm
Edward McCutcheon
Jose Luis Plaza
Abbie Crisp Williamson

MASTER OF PUBLIC HEALTH
Stephanie Ann Allen
Amanda Jean Allman
Jennifer Marie Anderson
Katherine Lynn Barmer

Annette M. Beyea
Katherine F. Blackman
Elizabeth Alanna Boudreau
Michael Dwayne Brooks
Erin E. Cashwell
Sandra G. Clark
Alexandra Caroline Collins
Laura C. Curtin
Elizabeth W. Dehmer
Alison Ruth Doernberg
Shelia Adams Dowd
Lauren Elizabet Elder
Walter Elias III
Nadear Abdurahman Gorashi Elmahi
Haiying Fan
Laura Renee Greenhow
Kendall B. Gurske
Jillian Lynn Hamilton
Laura Klatt House
LeRon Celeste Jackson
Patricia Sue Kempton
Maria Elaine Kennedy
Samantha Theresa Kepler
Emily Anne Kujawa
Mary Elizabeth Kushman
Katrina Beth Levine
Brittney Nicole Martin
Mary Cordon McGee
Terrance Shawn McGill
Karen Lynn Meyerhoff

THE BICENTENNIAL STAFF

The faculty marshal carries the bicentennial staff while leading the faculty processional on ceremonial occasions such as Commencement and University Day. The staff, commissioned for the University's 1993 bicentennial celebration by John Sanders, professor emeritus and former director of the UNC Institute of Government, and his wife, Ann Beal Sanders, was modeled by sculptor Pete Hinton. It consists of a sterling silver three-inch-high replica of the Old Well mounted on a turned and tapered oak shaft. The shaft was made from timber salvaged from the 1822 section of Old West residence hall during its 1991–1993 renovation.

Khanh Hong Nguyen
Erin Ashley O'Quinn
Andrea Drulard Orben
Emily Summer Padian
Ashley Lauren Paynter
Anne R. Petraeus
Anna Christine Pfaff
Allison Walker Rice
Molly Rebecca Ruben
Michael Scott Runyon
Patrick Josey Smith
Jessica Kristen Southwell
Michael J. Steiner
Leah S. Tedrick-Moutz
Kerone Walker
Melissa Jolyn Williams
Lindsay Ann Wilson
Dwight Edward Yin

MASTER OF SCIENCE IN ENVIRONMENTAL ENGINEERING
Brad Northwood Bennett
Rebecca C. Cohen
Chieh-Han Lee
Eliot Stephen Meyer
Jessica Montanez

MASTER OF SCIENCE IN PUBLIC HEALTH
Ayodele Ayoka Alakija
Nadya Maria Belenky
Yael Rose Filossof
Laura Oredola Houenou
Jui-Yen Huang
Alan Christopher Kinlaw
Aliza Kate Liebman
Jennifer Lindsay Moore Moss
Crystal Mela Nicholson-Springer
Bridget Elizabeth O'Brien
Damon Floyd Ogburn
Mirna Yesenia Rauda
Lindsay Stortz
Arianna Taboada
Melissa Anne Tinling
Kara E. Van de Grift
Alexandra Jayne White

The School of Social Work

ESTABLISHED 1920
Dean Jack M. Richman

MASTER OF SOCIAL WORK
Amanda Jean Allman
Katherine F. Blackman
Alexandra Caroline Collins
Alison Ruth Doernberg
Kendall B. Gurske
Khanh Hong Nguyen
Erin Ashley O'Quinn
Erik Brandon Osborne
Mirna Yesenia Rauda
Marlon Correll Smallwood
Arianna Taboada
Kara E. Van de Grift

CANDIDATES *for* BACCALAUREATE DEGREES

December 2012

The College of Arts and Sciences

ESTABLISHED 1795
Dean Karen M. Gil

BACHELOR OF ARTS

African and Afro-American Studies
Mycal Xavier Brickhouse
Bianca Rae Champagne Brown
Konstance Leanne Brown
Qualyn Patrice Brown
Phillip Lamont Goode
Kiera Simone Louissaint
Sherry Lynn Myers*
Samuel Everett Pride

American Studies
Chelsea Sheree Reynolds
Elisabeth Ryan Suttee

Anthropology
Lauren Frances Alexander
Meagan Alexandria Crumpton
Gregory A. Egerton
Sarah Katherine Farnsworth*
Cheryl Irene Johnson
Robert Henry Lowry
Marietta Stafford Stewart
Chalice Warfield Yehling

Archaeology
Sarah Katherine Farnsworth*
Cassandra Dawn McGuire*
Lindsay Nicole McVicar*
Mikel Colin Wein

Art History
Sara Margaret Bass

Asian Studies
Christopher Donald Bingham
Anna Elizabeth Powers*
Saba Afzal Warraich

Biology
Karl Krisst Aguilar Montoya
Zemel Zemiesha Brown
Jesse A. Goldberg
Margaret Elizabeth Green*
Megan Elizabeth Hall
Alivia Iorio
Thomas Bryant Jordan
Emily Grace Lopez
William Cleveland Lovell
Priyanka Manocha
Noah Angelo Pagano
Ankita D. Patel
LaShawn Antoinette Pennington
Ruben Prado
Paige Leigh Reagan
Stephanie Anne Robinett
Lisa Christina Senko
Melissa Margarette Shatzer
Samuel David Shuford
Mary Katherine Sommers
Hannah Jesse McDonough Walker
William Roy Woods
Ji Won Yoon

Chemistry
Jacky Paul Fong
Lukas Gregory Keil*
Heejoong Kim
Michael G. Maggio
Shirin Negmadjanova*
Michelle Anne Ocampo
Jimmy Nicolas Pan
Jean Ra
Timothy William Rodriguez
Dayley Shea Wilson*
Yan Ying Yang

Classics
Maegan Louise Johnson

Communication Studies
Casey Kenneth Barth
Georgeanna Catherine Bowen
Brennan Aram Boyajian
Lauren Lea Bunch
Terrica Victoria Carrington
Xi Chen
Jonathan Javell Cooper
Marquel Kathleen Dougherty
James Edward Dunster
Zachary Thomas Evans
Kyle Louis Fageol*
Dion Latez Guy
Grace Antonia Hartmann
Zach Austin Hunter
Peyton Simmons Jenest
John Nicholas Kepple
Noelle Simone Leader
Laura Leigh Leftwich
Mark Dustin McCarty
Michael Charles McComas
Omar Morales
Ian Patrick Morrison
Shelby Aileen Nash
Elizabeth Shirley O'Hare
Mariko Ohigashi*
Kathryn Matheson Plyler
Allen Jamicah Reynolds
Elizabeth Jordan Rodell
Courtney Danielle Satterwhite
Stacie Nicole Scheuermann
Erik Harrison Sugar
Jessica Carolyn Uzmann
Caitlin Ford Van Sickle

DEGREES WITH DISTINCTION

To graduate with distinction or with highest distinction, undergraduate students must have completed at least 45 academic hours at UNC–Chapel Hill and have an overall grade point average of at least 3.5 or 3.8, respectively.

UNDERGRADUATE HONORS PROGRAM

The Honors Program offers exceptionally well-qualified first-year students, sophomores and juniors an opportunity to take part of their general education curriculum in special honors seminars and honors sections. Honors seminars are special topics courses, limited in enrollment to 15 students and taught by outstanding members of the University faculty. Honors sections of regular departmental course offerings are also limited in enrollment and are taught by permanent members of the University faculty. Honors seminars and sections emphasize critical reading, class discussion and expository writing.

Senior departmental honors programs are provided for students who have demonstrated a very high level of scholastic ability and achievement and who desire to pursue an intensive, individualized program of study in their major discipline. Honors studies ordinarily consist of one or more of the following: the preparation of an honors thesis or essay, an independent research or reading program, an artistic performance or exhibition, or the completion of advanced course work in the major not normally required of students in that major. It is on the basis of participation in senior honors that a student may be graduated from the University "with Honors" or "with Highest Honors."

Madeline Christine Varney
Alfred Williams
Wallace S. Wong

Computer Science
Leander Enrique Lanzo

Contemporary European Studies
William Blake Smith

Dramatic Art
Evangeline Carrere Mee*
Pimpila Nicole Violette

Economics
Karen Keziah Arulsamy
David Bradford Baugus
Joachim Bersztel
John Michael Blackmar*
Matthew Alexander Bonds
Alexander James Cauble
Yan Ling Chan
Melissa Denise Chang
Robert Davis Coleman
Kevin Joseph Dolan
Gabrielle Katheryn Forgione
Nicholas Edward Thompson Gittin
Robertson Walters Greenbacker
Manchen Hao
Michael John Huber
Ryan Cameron Hurd
Jarrett Islam
Wook Jang*
Alexander Matthew Jerman
Xuejiao Jiang
Heather Joy Kagan
Andrew Kakunda
Poonam Pankaj Kalaria
Alexander Dougherty Kane
Kwabena Opuni-Frimpong Keene
Amanda Elizabeth Klanduch
Katherine Faith Knish
Taylor Justice Kolasinski
Brandon Norman Lamoureux
Jonathon Hisao Lew*
Anlong Li*
Christopher Xin Li
Ewen Liadi
James Patrick Locke
Danyun Luo
Andrew May*
Mansi Mehra
Stephen Ray Methvin III
Gema Milanes Hernandez
Hyuk Joo Na
Sabina Nogo*
Stephen Shephard Padgett*
Robert Pan
Erica Frances Papes
Jesse Lee Park
Lauren Elizabeth Player
Edgard Roberto Puente
Bradley S. Reid
Thomas Donald Schrader
Cristopher William Seippel
Sora Shin
Sergio Andres Sime
Samuel Eric Stokes
William Tyler Thompson
Dmitri Vitali Vorontsov
Jeffrey I. Wagman
Meinong Wang
Andrew John Wilbur
Cassandra Renee Willemstein
Elizabeth Mary Woodward
Hye Rim Yang

English
Joseph Peter Bowman
Caleb Joshua Cody
Robert Davis Coleman
Carly Michelle Couch*
Alyssa Kay Duhon
Jennifer Leigh Dutton*
Isabelle Rosemary Hale*
Tiffany Nicole Henry
Harrison Taylor Holbrook*
Mary Elizabeth Hope
Latrisha Anne Jenkins
Natascha Jenkins
Carol Lynn Longoria*
Amber Marlena Lynch*
Dasha Daines Menafee
Rebecca Conner Messinger
Livia Christina Nelson
Ella Ray Ott*
Margo Lynne Raynor
Kathryn Chelsea Reardon
Anna Jean Schroeder*
Rachel Valere Sinning
Jessica Ann Slee
Kevin Sly
Kimberly Meghan Stein
Henry Louis Stephenson*
Madeline Christine Varney
Hannah Taylor Vogel
Maria Connolly White
Johanna Elise Zalesky
Sophia Zhang*

Environmental Studies
Kyle Erick Anderson
Winston Allen Blake
Maria Cristina Flanagan

Exercise and Sport Science
Jordan Alexander Babwah
Chase Dylan Baccus
Lauren Olivia Belk
Cameron Lee Brown
Jaren Roland Burleyson
Tyler Logan Cope
Jordan Mose Curles
Adam Vanoid Curry
Hannah Joy Daly
Kumar Dinesh Dave
Whitney Tyler Deedmeyer
Daisy Karina Delgado
Jordan C. Gafa
Grace Marie Glembocki
James Warren Haeseker
Brad Anthony Hamilton
George Michael Hanna
Sarah Louise Hart*
Kristen Leigh Harvey
Mary Catherine Hollowell
Caitlin Victoria Keiler Hooks
Elizabeth Joan Hurley
Nelson Greer Hurst
Nikolas Bernard Jannetta
Brock Anthony Livorio
Maria Lubrano-Lavadera
David Ashten Malik
Nidia Milet Menjivar
Heather Nicole Moore
Catherine Spencer O'Donnell
Erin Bowman O'Reilly
Kenneth Craig Owens
Melanie Tina Jessica Reyer
Morgan Ariel Roberts
Gene Langston Robinson
Tarron Alonzo Robinson
Kendall Ashley Shields
Ethan Brady Siler*
Ashley Morgan Smith
Christopher Trey Strickland
Parker Crim Thomas

Geography
Kyle Erick Anderson
Chase Dylan Baccus
Abraham Joseph Jaroszewski
Shelley Alanna McGee
Noah Harvey Menaker*
Lorelei Rao

Germanic and Slavic Languages and Literatures
Harrison Collins Compton*
Jesse Dean Crouch
Lowell Elizabeth Hutcheson*
Hyelim Nam
Livia Christina Nelson

Global Studies
John Michael Blackmar*
Burcu Bozkurt*
Christopher Thomas Casberg*
Yan Ling Chan
Maria Graciela Diaz
Deniz Esmen
Robert Kane French*
Kaitlin Nicole Groundwater
Emily Ruth Haines
Shirley Cason Jenkins
Laura Anne Kirchhofer*
Clea Marie Major
Rashida L. Moore
Aaron Glenn O'Neill
Norma Jisselle Perdomo
Jinling Quan
Whitley A. Richards*
Kevin Verlagone Richardson
Jeanna Marie Smialek*
Stella Marie Strohmeier
Julia Rose Taylor
Ariel Genevieve Wyman*

History
Sara Margaret Bass
Andrew James Beckman
Michael Bryant Cohen
Rachel Meredith Davis*
Jennifer Leigh Dutton*
Terran Patricia Greene
Jeffrey Alan Harlan
William McLeon Harris
Jason Kyle Henson
Jonathan Raul Herrera
Kyle Murry Holland
Matthew Hunter Holman
Kathleen Anne Janes
Lynne Ellen Jones*
Monica Catherine Krebs
Cassandra Dawn McGuire*+
Lindsay Nicole McVicar*
Eric Cameron Melton
Boyd Arthur Neal
Nathan Randall Pearl
Jason Pennington

* *Indicates probable candidates for degrees with distinction or highest distinction based on grade point average going into the final semester.*

\+ *Indicates Honors recipients.*

++ *Indicates Highest Honors recipients.*

Lauren Elizabeth Player
Olivia Jordan Poss
William Tucker Pryor
You Kai Puah
John Patterson Pulliam
Margo Lynne Raynor
Ethan Brady Siler*
Moyer Gray Smith
Ella Marie Sullivan*
Mikel Colin Wein
Andrew Joseph Yavorski
Elizabeth Brown Zimmermann
Laura Kenna Zuppo

Interdisciplinary Studies
Evangeline Carrere Mee*+

Latin American Studies
Colin Alexander Anderson
Alexandra Kristin Morris*
Carlos Adolfo Ortiz

Linguistics
Bianca Rajesh Bulchandani
Victoria Ashley De Andrade
Ivy Ilyse Hauser*
Marion Ruth Hicks
Paula Elizabeth Kelly
Philip Hunter McCray*
Elizabeth Shirley O'Hare
Anna Elizabeth Powers*
Kathryn Chelsea Reardon

Management and Society
Casey Kenneth Barth
David Bradford Baugus
Daniel Hudson Blackwell
Sean Christian Burke
Melissa Denise Chang
Jonathan Maxwell Clark
Joie Celeste Hasberry
Alexander Matthew Jerman
Andrew Kakunda
Jeffrey Michael Keeley
Matthew Michael Kolojejchick
Alex J. Maciag
Gema Milanes Hernandez
Thomas Donald Schrader
Levi Abraham Stecker
Thomas Cornay Wood

Mathematics
Morgan Lindsay Alexander
Amber Elizabeth Fickes
Taylor Justice Kolasinski
David Lao
Min Woo Lee
Samuel Eric Stokes
Kayleigh Willis

Music
Nanako Tsurumi

Peace, War and Defense
Aeris Jennifer Alexandros
Rosalind Jane Allen
Justin Lee Bean
Kelsey Renee Brinkman
Monica Nwamaka Chioke
William Caldwell Clement
Lauren Kemp Cloninger
Matthew Robert Cook
Piereangello Cruz
Alexandria Eden Davies
Elizabeth Jane Deane
Kathleen Irmina Diaz
Nicholas Griffin Eakes
Shin Ting En
Kathryn Elizabeth Ferguson
Gabrielle Katheryn Forgione
Nancy McCormick Foy
Rachel Maines Goodrich
Michaele Allexandria Hines
Caitlin Victoria Keiler Hooks
Andrew Robert Hove
Michelle Van Huynh
Philip Harrison James*
Emily Louise Johnston
Lawson Thomas Kluttz
Sara Jeanne Leung
Kadeem Dant'e Lewis
Mindie Lee Loebach
Kendra Chauntell Miller
Amber Marie Mink
Zeeshan Mithani*
Margaret Jennings Nash
Elizabeth Ann Nicholson
Laney Leigh Oaks
Daniel Otarola
Mary Katherine Palmer
Nadia Paige Phipps
Tracy Lynn Powers
Stephanie Christine Ramdat
Deborah Danielle Ross
Andrew Paul Simpson
Cassandra Bernice Slay
Christina Marie Stanton
Eric Lloyd Watson
John Fritzgerald Weeks
Robert Bynum Works

Philosophy
Terrica Victoria Carrington
Brett Allen Fox*
Richard Robert Harenberg Jr.
Joseph Harrison Lee
Dmitri Vitali Vorontsov
Nicholas Adam White

Physics
Jeremy Calvin Ward

Political Science
Katie Elizabeth Atmonavage*
Alex Edward Beuris
Sarah Grayson Bland
Mycal Xavier Brickhouse
Bianca Rajesh Bulchandani
Jonathan W. Burns
Justin Robert Carmen
Jennifer Marie Clark
Paul Spencer Darsie
Therren Jermaine Dunham
Kimzey Lea Ellis*
Deniz Esmen
Carly Nicole Fields
Patrick John Flueckiger
Brett Allen Fox*
Robert Kane French*
Jeremiah Thompson Gerlach
Mariana Jimena Gomez
Paula Andrea Gonzales
Ethan Gray Hendricks
Caline Kit-Lien Hou*
Abraham Joseph Jaroszewski
Shirley Cason Jenkins
Berling Joseph
Monica Catherine Krebs
Sanghuhn Lee
Laura Leigh Leftwich
Justin Merryman Mayhew*
Stephen Ray Methvin III
Sabina Nogo*
Stephen Shephard Padgett*
Hubert Russell Papes
Anastasia Postnikova*
Chelsea Sheree Reynolds
Evan Thomas Ross
Vilas Vishnu Sankar
Alexander Douglas Selig
William Blake Smith
Ella Marie Sullivan*
Wendy Tapia
Eric Lloyd Watson
John Fritzgerald Weeks
Elizabeth Mary Woodward

Psychology
Aeris Jennifer Alexandros
Rosalind Jane Allen
Jacquelyn Nicole Basquill
Kelsey Renee Brinkman
Monica Nwamaka Chioke
Jennifer Marie Clark
William Caldwell Clement
Lauren Kemp Cloninger*
Piereangello Cruz
Adam Vanoid Curry
Alexandria Eden Davies*
Kathleen Irmina Diaz
Alyssa Kay Duhon
Nicholas Griffin Eakes
Shin Ting En
Kathryn Elizabeth Ferguson
Nancy McCormick Foy*
Rachel Maines Goodrich
Chantae Danielle Harris
Michaele Allexandria Hines
Caitlin Victoria Keiler Hooks
Caline Kit-Lien Hou*
Michelle Van Huynh*
Emily Louise Johnston
Kadeem Dant'e Lewis
Mindie Lee Loebach
Paige Erin McClear
Kendra Chauntell Miller
Amber Marie Mink
Margaret Jennings Nash
Elizabeth Ann Nicholson
Laney Leigh Oaks*
Daniel Otarola
Mary Katherine Palmer
Nadia Paige Phipps
Olivia Jordan Poss
Tracy Lynn Powers
Melissa Lucianna Rees
Deborah Danielle Ross
Andrew Paul Simpson*
Cassandra Bernice Slay
Courtney Anne Sorensen*
Christina Marie Stanton
Rachel Marie Stout
John Fritzgerald Weeks
Jessica Michelle Young

Public Policy
Konstance Leanne Brown
Lakesha Nichole Buckner
Jesal Kirit Desai
Zeeshan Haque*
Kathleen Anne Janes
Veronica Joyner
Stephanie Christine Ramdat
Devon Jahmai Ramsay
Heather Seaman*
Andrew Joseph Yavorski

Religious Studies
Lee Gilbert Anderson
Andrew James Beckman
Ashley Elizabeth Best
Ivy Ilyse Hauser*

Romance Languages
Alyssa Lauren Bailey*
Sophie Alexandra Delany*
Kimzey Lea Ellis*
Mireia Sarai Farrell
Sarah Louise Hart*
Philip Harrison James*
Alexandra Jean Mario
Meagan Rebecca Meekins
Alexandra Kristin Morris*
Ella Ray Ott*
Norma Jisselle Perdomo
Whitley A. Richards*
Alexander Douglas Selig
Rachel Valere Sinning
Zoemma Kerr Steffen
Kimberly Meghan Stein
Sebastian Andres Werner

Sociology
Laura Leah Aho
Jordan Michael Diaz
Joyelle Autumn Gordon
Diana Marie Green*
Andre Alonzo Gregorio
Tori Brittany James
Allen Kenneth Johnson
Jessica Laurel Kirby
Jonathon Hisao Lew*
Jessica Anne Lopez
Sarah Elizabeth Moller*
Martin Robert Murphy
Nathalie Noel
Tasha Lee Stanley

Studio Art
Leah Brittany Heidelmeier
Kwabena Opuni-Frimpong Keene
Mariko Ohigashi*
Logan Elizabeth Ripley
Swarnadurga Sivamani
Ariel Genevieve Wyman*

Women's and Gender Studies
Katherine Marie Watkins*

BACHELOR OF FINE ARTS
Katherine Francis Bobeck

BACHELOR OF MUSIC
Caroline Curran Iantosca

BACHELOR OF SCIENCE

Applied Science
Khodjimuradkhon Maksumov
Peter Marshall Mangum*
Natan Siegel

Biology
Kevin Fordyce Andringa*
Justine Marie Beres*
Dylan Huntley Campfield
Andrew N. Chan*
Jeong Hwa Cho
Esther Jin-Joo Choi
Seung Samuel Choi*
Stephen William Cooper
Han Eol Eom
Lukas Scott Erlemann
Luke Scarpino Ferro*++
Patrick Brian Fuller
Julie Francis Gassmann
Joseph Scott Goodwin*++
Michael Loy Gracia
Matthew Adam Hodges*++
Stevi Marie Holmes
William Clifford Hope*
Molly Anne Hornsby*
Lauren Nicole Huey*
Syed Sikender Jaffery*
George Franklin Jones
Julie Marie Kang
Lukas Gregory Keil*
Caroline Suzanne Kirby
Samantha M. LeDonne*
Elizabeth Lee
Kimberly Lauren Mickey*
Kenny K. Namkoong
Vinca Puri
Sarah L. Ricker
Siyuan Peter Sheng*
John Cortland Smith*
Bradley Dewayne Strickland
Alexander Robert Walters
Jillian Danielle Weigel
Sebastian Andres Werner

Chemistry
Gabriela Estefania Agostini Naranjo
Phuongoanh Nguyen Dang
Kyle David Pridgen
Zoe Lee Watson*++
Yu Zhang

Computer Science
Ren Alexander Bauer
Grant Culver Fowler
Zachary Mark MacHardy*
Antonio Gian Paolo Mantovani
Frederick Barrett Meyer
Roger Que*
Joshua Booten Taylor
Kishore Venkat Yedavalli

Environmental Sciences
Samuel McMichael Amos
Michael Ryan Clear
Brian Heesang Lee
Dana Allison Welker

Geological Sciences
Cooper William Harris+
Matthew Franklin Leader
Katherine Louise Moore+
Gabriel Edwin Lee Parrish+

Mathematical Decision Sciences
Xin Chi*
Teofilus Gunawan
Heejoong Kim
Philip Evan Laganis
Min Woo Lee
Robert Pan+
Kyle Arthur Rhash*++
Rachel Whitley Stroud

Mathematics
Gustave Ethan Demilio
John Austin Ellis
Haipeng Gao*
Michael Evan Loiacono

Psychology
Morgan Lindsay Alexander
Hannah Marie Alves*
Anne Frances Cappelletti
Vanessa Chilombo Da Costa
Jaren Grant Dickerson
Gregory A. Egerton
Marcus Ryan Gillon
Brian Hyunki Kim
Andrew David Kimmel
Devin Victoria Kiser
Paige Erin McClear
Nickeisha Moore
Erin Bowman O'Reilly
Malaika Esther Pacque*
Jonas Ian Park
Charles Matthew Summerlin
Matthew Nowell Willey

The Kenan–Flagler Business School

ESTABLISHED 1919
Dean James W. Dean Jr.

BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION
Mohmammad Shahir Amin
Logan Lee Bolick
Joshua Wesley Bridges
Stephen Ward Casscells-Hamby*
Hideki Chida*
Colin Voils Davis*
Matthew Gillis Delafield
Mohammad Zeeshan Farrukh
Adelaide Anne Gay*
Andrew North Glander
Xinzi Gong*
Matthew Ralph Goolsby*
Kara Michelle Jongkind*
Kyrie Elizabeth Joyce*
Christopher Patton Kah
Ryan Andrew Kieras*
Hei Tung Leung
Laurel Anne Loeblein
Jeremy Nathaniel Lutz
Timothy Robert Mertes

* *Indicates probable candidates for degrees with distinction or highest distinction based on grade point average going into the final semester.*

\+ *Indicates Honors recipients.*

++ *Indicates Highest Honors recipients.*

Jared Reed Neely*
Daniel Thomas Potter
Brandon James Quinones
Jeffrey I. Wagman
Jianong Wu
Ruopiao Xu*
Junying Yan*
Ho Yu Yau

The School of Education

ESTABLISHED 1885
Dean G. Williamson McDiarmid

BACHELOR OF ARTS IN EDUCATION
Allison Gregory Murray*
Marit Anna Nelson*

The School of Information and Library Science

ESTABLISHED 1931
Dean Gary Marchionini

BACHELOR OF SCIENCE IN INFORMATION SCIENCE
Cortney Catherine Cogar
Nicholas Scott Eckemoff
Richard Colin Jennings
Allison Jeanne Kupatt
Jesse Collin Pegg
Marla C. Sullivan*++

The School of Journalism and Mass Communication

ESTABLISHED 1924
Dean Susan Robinson King

BACHELOR OF ARTS IN JOURNALISM AND MASS COMMUNICATION
Matthew Bernard Abadie
Alexandra Aparicio
Katie Elizabeth Atmonavage
Alyssa Lauren Bailey*
Denise Ida Barnes
Courtney Patrice Beal
Georgeanna Catherine Bowen
John Andrew Couch
Paul Spencer Darsie
Ryan Anthony Davis
Ashley Cristine Fernandez
Carly Nicole Fields
Jeremiah Thompson Gerlach
Johnny Gil
William Kelly Green
Erica Leigh Heller
Erin Colleen James
Nathaniel James
Kayla Chantel Kennedy
Alexandra Jean Mario
Justin Merryman Mayhew*
Carter Francis McCall
Christopher Andrew Moore
Miranda Lee Murray
Samuel Morris Rinderman
Adam Daniel Schifter*
Sondra Lynn Schmidt
Todd Kyle Scott
Jeanna Marie Smialek*
Mark Andrew Staines
Katelyn Sophia Trela
Alexandria Jo Wilson
Qianye Yan
Caitlin Marie Yaniec

The School of Medicine

ESTABLISHED 1879
Dean William L. Roper

BACHELOR OF SCIENCE IN RADIOLOGIC SCIENCE
Janna Wesley May

The School of Nursing

ESTABLISHED 1950
Dean Kristen M. Swanson

BACHELOR OF SCIENCE IN NURSING
Erik Matthew Andersen
Andrew DeMott Attix
Barbra Avery Beck
Joseph Michael Biddix++
Kathleen Mairin Boodee*
Destiny P. Breland*
Kristen Ashleigh Carter
Michael William Causey*
Caitlin Paige Culbreth
Stevie Nicole Davenport
Darcy Robin Dennison-Harwood*
Hollister Elizabeth Dibble
Ashley Nicole Dyok*
Miguel Jose Ferry-Hernandez
Riley Rhea Foster
Camille Mae Freeman
Leslie Ann Goodling*
Mary Kathleen Goodwin*++
Qiang Guan
Hanna Brittany Hallbauer
Casey Lauren Harrison
Jacob Robert Haskins*+
Megan Elizabeth Hildebran
Nathaly Infante Hill
Kelly Alexandra Hughes
Amanda Gabrielle Hunsucker
April Marie Husenita*
Marie-Anne Sylvie Jean
Cynthia Lachmann-Johnston
Alexander Martin Kass
Julie Elizabeth Kirklin*
Andrew Owen Koch
Dana Leigh Kouchel
Jessica Ann Kyprios
Summer Danielle Langston*
Stephanie Adair Colenda Lea
Megan Danielle Lucovsky*+
Amy Bahr Margison
Francia Elena Marin
Tyler Frederick Marva
Jessica Adrienne McCann
Jennifer Grace McFadden
Jenna Elizabeth McIntosh
Samuel Alexander Morse*
Paul Nguyen
Jane Opudo Ochieng
Noah Angelo Pagano
Leah Gertrude Parks*
Ajay Bankim Patel*
Aaron Mitchell Peak
Alissa Moore Portenier
Jennifer Elizabeth Price*
Bridget Akwetey Quaye
Emily Elizabeth Reynolds*
Leah LeMaster Rose*
Lauren Leigh Sauve*+
Karin Marie Schudel*
Sara Morgan Scott
Isha Shah*
Stephanie Nicole Shannon
Courtney Anne Sorensen*+
Sara Ann Spillane*
Catherine Leigh Stang
Elizabeth Clark Stocksdale*
Merle Chui Yi Tai
Lauren Elizabeth Tesch*
Amber Marie Thomas
Stefanie Thomas
Yanina Moreno Wyniemko
Chelsea Ann Zurl*

The Gillings School of Global Public Health

ESTABLISHED 1939
Dean Barbara K. Rimer

BACHELOR OF SCIENCE IN PUBLIC HEALTH
Burcu Bozkurt*+
Avery Katherine Bullock
Allison Grace Cummings*
Matthew Bennett Jernigan
Joseph Roy Parker IV*
Henry Tang Zhang

Candidates Commissioned in The Armed Forces

DECEMBER 2012

UNITED STATES AIR FORCE SECOND LIEUTENANT
John Michael Blackmar
Jason Pennington

UNITED STATES NAVAL ENSIGN
Tyler Frederick Marva

* *Indicates probable candidates for degrees with distinction or highest distinction based on grade point average going into the final semester.*

\+ *Indicates Honors recipients.*

++ *Indicates Highest Honors recipients.*

CANDIDATES *for* CERTIFICATES

December 2012

Undergraduate Certificates

The School of Medicine
ESTABLISHED 1879
Dean William L. Roper

CERTIFICATE IN RADIOGRAPHY
Mandi D. Cooke

Postbaccalaureate Certificates

The School of Journalism and Mass Communication
ESTABLISHED 1924
Dean Susan Robinson King

CERTIFICATE IN TECHNOLOGY AND COMMUNICATION
Kenneth Wayne Berry
Jessica Carlson
Brian Elvin Cox
Judith Michelle Panitch
Melinda F. Rains
Anne Randolph Sutton
Kimberly Lynn Workman
Stephen Kyle York

The Gillings School of Global Public Health
ESTABLISHED 1939
Dean Barbara K. Rimer

CERTIFICATE IN CORE PUBLIC HEALTH CONCEPTS
Susan Elizabeth Barham
Nathan William Epling
Silena L. Faulkner
Lisa Marie Gehtland
Rory Forseth Leisegang
Amer Saeed Malik
Grayson Mitchell Privette
Shriya Soora
Catherine Soriano
Sharmila Udyavar

CERTIFICATE IN FIELD EPIDEMIOLOGY
Molly Sharon Severson
Kelly Trent

CERTIFICATE IN GLOBAL HEALTH
Alyssa Ferri
Kelly Marie McDonald
Laura Joan Philpot
Stephanie Lynn Warner

CERTIFICATE IN OCCUPATIONAL HEALTH NURSING SPECIALTY
Vincent Edward Pair

CERTIFICATE IN PUBLIC HEALTH LEADERSHIP
Eva Lorenz

GRADUATE DEGREES

August 2012 | *Graduates' names are followed by their area of major study, dissertation or project title and the name of their doctoral advisor.*

The Graduate School

ESTABLISHED 1903
Dean Steven W. Matson

DOCTOR OF PHILOSOPHY

Lee M. Adcock III, *Education,* Re-Casting the Hollywood Indian: Technology Integration at Sequoyah Schools. Professor Cheryl Mason Bolick.

Caroline Bliss Adelman, *Psychology,* Examination of Concurrent and Longitudinal Associations among Emotional Reactivity to Stress, Interpersonal Problem-Solving and Adolescent Nonsuicidal Self-Injury. Professor Mitchel J. Prinstein.

Robert Erle Barham, *English,* Rhetorical Failure in English Renaissance Literature. Professor Jessica Wolfe.

James Berry, *Business,* Do We Have Creative Differences? How We Construe Creativity Influences: The Salience of Novelty and Usefulness. Professor David A. Hofmann.

Rebecca H. Best, *Political Science,* Negotiation in the Shadow of an Extremist Threat: Insurgencies and the Internal Commitment Problem. Professor Navin Bapat.

Allison Margaret Bigelow, *English,* Mining Empire, Planting Empire: The Colonial Scientific Literatures of the Americas. Professor Timothy Marr.

Anne Michele Blankenship, *Religious Studies,* Steps to a New World Order: Ecumenism and Racial Integration during the World War II Japanese American Incarceration. Professor Laurie Maffly-Kipp.

Laura E. Blue, *Chemistry,* Synthesis, Physical Characterization, and Chromatographic Performance of 1.7 μm and 1.1 μm Superficially Porous Particles Packed in Capillary Columns for Liquid Chromatography. Professor James W. Jorgenson.

Angela Yarnell Bonino, *Speech and Hearing Sciences,* The Effect of Signal-Temporal Uncertainty during Childhood. Professor Lori J. Leibold.

Asya Lazarova Borikova, *Pharmacology,* Regulation and Function of Cerebral Cavernous Malformation Proteins. Professor Gary L. Johnson.

Heather Lee Branstetter, *English,* An Alfa-Omega Approach to Rhetorical Invention: Queer Revolutionary Pragmatism and Political Education. Professors Jordynn Jack and Jane Danielewicz.

Anna Brigevich, *Political Science,* Territorial Identity Configurations in the European Union: The Impact of Regional Identity on Attachment to Europe and Support for Integration. Professor Liesbet Hooghe.

Emily Suzanne Brouwer, *Epidemiology,* Myocardial Infarction among HIV-Infected Patients Enrolled in the North Carolina Medicaid Program. Professor Til Sturmer.

Randy M. Browne, *History,* Surviving Slavery: Politics, Power and Authority in the British Caribbean, 1807–1834. Professor John Wood Sweet.

Jessica Caroline Cardenas, *Pathology,* The Role of P16 ^{Ink4A} Expression in the Age-Related Risk of Venous Thromboembolism. Professor Frank C. Church.

David Cavallo, *Nutrition,* Using Online Social Network Technology to Increase Social Support for Physical Activity: The Internet Support for Healthy Associations Promoting Exercise (INSHAPE) Study. Professor Alice S. Ammerman.

Fernando Chague, *Economics,* Conditional Betas: Asymmetric Responses to Good and Bad News. Professor Eric Ghysels.

Roseanne Marie Cheng, *Physics and Astronomy,* Tidal Disruption of a Star by a Massive Black Hole Computed in Fermi Normal Coordinates. Professor Charles R. Evans.

Karen Ann Cherkis, *Genetics and Molecular Biology,* Structural Analyses of AvrRpm1 and HopBA1: Two TTSS Effectors from the Plant Phytopathogen Pseudomonas Syringae. Professors Jeffery L. Dangl and John E. Sondek.

Alexandros Christodoulou, *Psychology,* Variation in Word Duration and Planning. Professor Jennifer E. Arnold.

Jeremy Cook, *Economics,* Essays on Teacher Mobility. Professor Donna Gilleskie.

Damien Croteau-Chonka, *Genetics and Molecular Biology,* Genetic Contributions to Obesity and Related Complex Traits in the Cebu Longitudinal Health and Nutrition Survey. Professor Karen L. Mohlke.

Boyi Dai, *Human Movement Science,* The Relationships between Performance and ACL Loading during Athletic Tasks. Professor Bing Yu.

Craig Dalton, *Geography,* Mashing-Up Maps: Google Geo Services and the Geography of Ubiquity. Professor Scott Kirsch.

Jean M. Davidson, *Biology,* S Phase-Coupled E2F1 Destruction Ensures Homeostasis in Proliferating Tissues. Professor Robert J. Duronio.

Marco Alexandre de Oliveira, *Comparative Literature,* Cannibal Logic: Latin America under the Sign of an Other Thinking. Professor Federico Luisetti and Walter Mignolo.

Carrie Duncan, *Religious Studies,* The Rhetoric of Participation: Gender and Representation in Ancient Synagogues. Professor Jodi Magness.

Margaret Elizabeth Duncan, *Pharmacology,* Characterization of Mechanisms of Antibiotic Resistance in Neisseria Gonorrhoeae. Professor Robert A. Nicholas.

Alan R. Ellis, *Social Work,* Effortful Control, Social Information Processing and the Prevention of Aggression in Elementary Schools. Professor Mark W. Fraser.

Sherine El-Toukhy, *Journalism and Mass Communication,* Priming Optimism: The Automaticity of Health Risk Perceptions. Professor Jane D. Brown.

Brandon K. Essary, *Romance Languages,* The Economy and Parody of Matrimony in Boccaccio's Decameron. Professor Dino S. Cervigni.

Matthew Barker Fariss, *Anthropology,* Gallinazo Phase Migration in the Moche Valley, Peru. Professor Brian R. Billman.

Lauren Elin Fovargue, *Mathematics,* Addressing the Computational Cost of the Immersed Boundary Method through Mulit-Implicit and Multi-Rate Strategies with Time Parallelism. Professor Michael L. Minion.

Megan Freeman, *Psychology,* Gene-Environment Interaction in Early Onset Bipolar Disorder. Professor Eric A. Youngstrom.

Christopher J. Gagliardi, *Chemistry,* Coupled Electron Proton Transfer in Biological Redox Substrates. Professors Thomas J. Meyer and Holden Thorp.

Nathan Geraldi, *Marine Sciences,* Oyster Reef Ecology and Restoration: Findings from Field and Mesocosm Studies. Professor Charles H. Peterson.

Rudresh Ghosh, *Physics and Astronomy,* Metal Oxide Thin Film Growth by Laser Ablation and Its Applications in High Surface Area Photoanodes. Professor Rene Lopez.

Arthur Gibb, *Political Science,* Implementing U.S. Security Strategy in the 21st Century: A Three-Part Examination of the Evolving Role of the Military in American Foreign and Security Policy. Professor Mark J. C. Crescenzi.

Clare Marks Gibson, *Psychology,* An Investigation of the Effects of Oxytocin on Social Cognition and Social Functioning in Schizophrenia. Professor David L. Penn.

Cary Gillenwater, *Education,* Graphic Novels in Advanced English/Language Arts Classrooms: A Phenomenological Case Study. Professor Madeleine Grumet.

Benjamin McMillen Goerger, *Human Movement Science,* The Effect of Anterior Cruciate Ligament Injury and Reconstruction on Lower Extremity Biomechanics, Coordination and Variability. Professor Darin A. Padua.

Jason Rosenbaum Goldsmith, *Pharmacology,* Mechanisms of Mu Opioid Receptor Mediated Protection from Multiple Models of Acute Injury. Professor Christian Jobin.

Inmaculada Gomez Soler, *Linguistics,* Acquiring Spanish at the Interfaces: An Integrative Approach to the L2 Acquisition of Psych-Verbs. Professor Misha Becker.

Susanne Gomoluch, *Germanic Languages,* Redeeming the Imagination: The Case Study, Literature and Medical Discourse around 1800. Professor Jonathan Hess.

Donald Lee Goss, *Human Movement Science,* A Comparison of Lower Extremity Joint Work and Initial Loading Rates among Four Different Running Styles. Professor Michael T. Gross.

Joshua Michael Gray, *Geography,* Understanding Regional Water Resource Dynamics Due to Land-Cover/Land-Use and Climate Changes in the North Carolina Piedmont. Professor Conghe Song.

John D. Guerry, *Psychology,* Towards a Biopsychosocial Model of Adolescent Self-Injurious Thoughts and Behaviors. Professor Mitchell J. Prinstein.

Mustafa Haluk Guler, *Economics,* Housing Wealth Effects Mechanism and the Monetary Policy Transmission in Turkey. Professor Richard T. Froyen.

Stephen J. Guy, *Computer Science,* Geometric Collision Avoidance for Heterogeneous Crowd Simulation. Professors Ming C. Lin and Dinesh Manocha.

Quaker Elizabeth Harmon, *Epidemiology,* Variations in Inflammatory and Cell Cycle Genes and Preterm Birth, Small for Gestational Age and Hypertensive Disorders of Pregnancy. Professor Stephanie M. Engel.

Shawnya L. Harris, *Art History,* Conceptualizing African American Art: The Market, Academic Discourse and Public Reception. Professor Lyneise E. Williams.

Hannah Reed Harwood, *School Psychology,* The Relationship between Attention Problems, Internalizing Symptons and Quality of Life in Youth Receiving Outpatient Services. Professors Eric A. Youngstrom and Barbara H. Wasik.

Qianchuan He, *Biostatistics,* Variable Selection, Sparse Meta-Analysis and Genetic Risk Prediction for Genome-Wide Association Studies. Professor Danyu Lin and Hao Zhang.

Pamela Rose Hesker, *Genetics and Molecular Biology,* Defining the Function of Pyrin, the Familial Mediterranean Fever-Associated Protein, in Inflammation. Professor Beverly H. Koller.

Jeremy Dale Hilburn, *Education,* High School Teachers' Perceptions of Teaching Civics to Immigrant Students in a New Gateway State. Professor Xue L. Rong.

Christen Feldmann Holly, *Public Policy,* The Discretion-Capacity Framework: A Conceptual Approach to Analyzing the Dynamics of Federalism and Social Policy. Professor Daniel Gitterman.

Jasmine Ti Hudepohl, *Psychology,* Generalized Restriction: Understanding Anorexia Nervosa in an Interpersonal Context. Professor Donald H. Baucom.

Colin Hughes, *Chemistry,* Total Synthesis of the Proposed Structure of Aldingenin B. Professor Michael T. Crimmins.

Dwight W. Irvin, *Education,* Factors Affecting Adult Talk in the Inclusive Classroom and the Socially Competent Behavior of Preschoolers with Autism Spectrum Disorder. Professors Brian A. Boyd and Harriet Able.

Ning Jin, *Computer Science,* Discriminative Subgraph Pattern Mining and Its Applications. Professor Wei Wang.

Suprateek Kundu, *Biostatistics,* Bayesian Nonparametric Methods for Conditional Distributions. Professors David B. Dunson and Pranab K. Sen.

Hoa Van Le, *Epidemiology,* Evaluation of the Performance of the High-Dimensional Propensity Score Algorithm to Adjust for Confounding of Treatment Effects Estimated in Healthcare Claims Data. Professor Til Stürmer.

Brandyn Gregory Rogers Lee, *Mathematics,* A Comparison of Eigencones under Certain Diagram Automorphism. Professor Shrawan Kumar.

Steven Leigh, *Human Movement Science,* The Influence of Technique on Throwing Performance and Injury Risk in Javelin Throwers. Professor Bing Yu.

Steven Morgan Lewis, *Biochemistry and Biophysics,* Computational Protein Interface Design and Prediction with Experimental Constraints. Professor Brian Kuhlman.

Colin Lickwar, *Genetics and Molecular Biology,* The Role of Set2, Transcription Factor Residence and Nucleosome Spacing in the Dynamic Access of Genomic Information. Professor Jason Lieb.

Cathay Liu, *Philosophy,* Unification in Descartes' Philosophy of Mathematics. Professor Alan J. Nelson.

Katy Liu, *Cell and Molecular Physiology,* Functions of Myosin-X in Polarized Epithelial Cells. Professor Richard E. Cheney.

Dendy D. Lofton, *Environmental Sciences and Engineering,* Factors Regulating Methane Production and Oxidation in Two Shallow Arctic Alaskan Lakes. Professor Stephen C. Whalen.

Diane Losardo, *Psychology,* An Examination of Initial Condition Specification in the Structural Equations Modeling Framework. Professor Sy-Miin Chow.

David S. Lowry, *Anthropology,* For the Healing of the Nations: Lumbee Indian Community, Christian Missions and the Transformative Power of Intervention. Professor James Peacock.

Matthew Lubin, *History,* Aftermath of War: Cypriot Christians and Mediterranean Geopolitics, 1571–1625. Professor Melissa M. Bullard.

Winnie Kavulani Luseno, *Maternal and Child Health,* Effect of the Mchinji Social Cash Transfer Pilot Scheme on Children's Schooling, Work and Health Outcomes: A Multilevel Study Using Experimental Data. Professor Kavita Singh Ongechi.

Ping Ma, *Pharmaceutical Sciences,* Drug-Loaded Lipid Nanoparticles for Improved Cancer Treatment: Engineering, In-Vitro and In-Vivo Evaluation. Professor Russell J. Mumper.

Leah Jill Sirkus McGrath, *Epidemiology,* Influenza Vaccine Effectiveness among Patients on Hemodialysis: Methods to Control the Healthy-User Bias. Professor M. Alan Brookhart.

Jessica Tsesha Meed, *Health Policy and Management,* Home Front — Exploring Associations between Household Structure, Coping Strategies and Behavorial Health Visits within the Military. Professor James V. Porto.

William J. Meyer Jr., *Anthropology,* Home of the Living, Land of the Dead: Dwelling with the Bronze and Iron Age Tombs of Southern Burgundy. Professor Carole L. Crumley.

Stephen Andrew Miller, *Chemistry,* Ultrafast Dynamics in Nanomaterials: From Gold Clusters to Dye-Sensitized Semiconductors. Professor Andrew M. Moran.

Maria Minakova, *Chemistry,* Advanced Computer Simulations of Nanomaterials and Stochastic Biological Processes. Professors Garegin A. Papoian and John M. Papanikolas.

Hayley Mitchell, *School Psychology,* A Longitudinal Examination of Father Involvement and Its Effects on the Social, Emotional and Economic Outcomes of Adult Offspring. Professor Barbara H. Wasik.

Ilyse R. Morgenstein Fuerst, *Religious Studies,* Religions of Empire: Islamicate Texts, Imperial Taxonomies and South Asian Definitions of Religion. Professor Carl W. Ernst.

Zsolt Nagy, *History,* Grand Delusions: Interwar Hungarian Cultural Diplomacy, 1918–1941. Professor Chad Bryant.

Robert Cooper Nathan, *History,* The Blood of Our Heroes: Race, Memory and Iconography in Cuba, 1902–1962. Professor Louis A. Perez Jr.

Punya Navaratnarajah, *Biochemistry and Biophysics,* Total Internal Reflection - Fluorescence Correlation Spectroscopy (TIR-FCS): Application to the Study of Ligand-Receptor Interactions. Professor Nancy L. Thompson.

Britton White Newman, *Romance Languages,* The Narrative of Censorship in Cuban Novels of the 1990s. Professor Rosa Perelmuter.

Ijeoma J. Nwabuzor, *Social Work,* Examining the Risk of Out-of-Home Placement among Child Welfare Involved Families Victimized by Domestic Violence. Professor Mark F. Testa.

Emily Anna Oblath, *Chemistry,* Microfluidic Devices for Performing Multiplexed Immunoassays and Nucleic Acid Tests. Professor J. Michael Ramsey.

Stephen Lecler Olivier, *Computer Science,* Locality Awareness for Task Parallel Computation. Professor Jan F. Prins.

Timothy Gerald Otten, *Environmental Sciences and Engineering,* Ecophysiology and Toxigenicity of Cyanobacterial Assemblages: Molecular Insights into Toxin Production — With Emphasis on Microcystins. Professor Hans W. Paerl.

Sakiko Oyama, *Human Movement Science,* Effects of Trunk Movement on Pitching Biomechanics and Performance in High School Baseball Pitchers. Professor Joseph B. Myers.

Jessica Hyui-Su Park, *Chemistry,* Design of Beta-Haiprins and Beta-Sheets for Molecular Recognition. Professor Marcey L. Waters.

Lisa Parker, *Health Behavior and Health Education,* Positive Prevention with Youth Living with HIV/AIDS in Kinshasa, Democratic Republic of the Congo. Professor Suzanne Maman.

Sarah Elizabeth Parker, *Comparative Literature,* Contrary Signs: Categorizing Illness in Early Modern Literature. Professor Jessica L. Wolfe.

Sharon Denise Parker, *Social Work,* Incarcerated Women: Exploring the Interrelatedness of Intimate Partner Violence, Drug Use and HIV Risk Behaviors. Professor Catherine Fogel.

Michael Vincent Paulauskas, *History,* Moscow on the Potomac: The Soviet Embassy and Detente, 1969–1979. Professor Donald J. Raleigh.

Jolynn Pek, *Psychology,* Fungible Parameter Contours and Confidence Regions in Structural Equation Models. Professor Robert C. MacCallum.

Sherket Breshon Peterson, *Pharmaceutical Sciences,* Defining the Structural Cues within Heparan Sulfate That Direct Heparanase Cleavage. Professor Jian Liu.

David Phillips, *English,* Black Blood/Red Ink: Fact, Fiction, and Authorial Self-Representation in Vladimir Nabokov's Look at the Harlequins!, Marguerite Duras' L'Amant De La Chine Du Nord, and Philip Roth's Operation Shylock: A Confession. Professor John McGowan.

Felix Portnoy, *Information Science,* Avoiding Ad Avoidance: Factors Affecting the Perception of Online Banner Ads. Professor Gary Marchionini.

Kavita Praveen, *Genetics and Molecular Biology,* Modeling Human Spinal Muscular Atrophy Mutations in Drosophila Melanogaster. Professor Gregory Matera.

Martha Priedeman Skiles, *Maternal and Child Health,* An Equity Analysis of Performance-Based Financing in Rwanda. Professor Sian Curtis.

Angela Proctor, *Chemistry,* Development of Peptidase-Resistant Peptide Substrates for Measurement of Protein Kinase B and Bcr-Abl Kinase Activity. Professor Nancy L. Allbritton.

Diana Marie Rancourt, *Psychology,* Potential Mechanism of Peer Influence on Adolescent Girls' Disordered Eating Behavior: An Experimental Design. Professor Mitchell J. Prinstein.

Billye N. Rhodes, *Education,* "We Can Speak for Ourselves": Parent Involvement and Ideologies of Black Mothers in an Urban Community. Professor George W. Noblit.

Vanesa Ribas, *Sociology,* On the Line: The Working Lives of Latinos and African Americans in the New South. Professor Jacqueline M. Hagan.

Jennifer Elise Ringberg, *Anthropology,* Daily Life at Cerro León, an Early Intermediate Period Highland Settlement in the Moche Valley, Peru. Professor Brian R. Billman.

Melinda Margaret Roberts, *Biology,* Genetic Regulation of Cell Death and Disease Resistance in Arabidopsis. Professor Jeffery L. Dangl.

Jane Robertson, *Education,* Self-Efficacy and Collaborative Learning: An Intervention Study. Professor Jeffrey A. Greene.

Jason Michael Rochette, *Chemistry,* Versatile Routes to Photo-Responsive Polyesters for Dual and Triple Shape Memory Biomaterials. Professor Valerie S. Ashby.

Derek Alan Rodriguez, *Information and Library Science,* Developing the "Understanding Library Impacts Protocol": A Method for Detecting and Communicating Academic Library Impact on Student Learning. Professor Helen R. Tibbo.

Hongyu Ru, *Statistics,* Statistical Analysis of Financial Time Series and Risk Management. Professors Eric Ghysels and Chuanshu Ji.

Megan Arlene Rúa, *Ecology,* The Role of Mutualists in Plant Response to Pathogen Infection. Professor Charles E. Mitchell.

Fatimah Sarifah Sallch, *Mass Communication,* Empowered Women Resist: Three Black Women Journalists in the Struggle for Civil Rights. Professors Jane D. Brown and Donald Shaw.

Brandon Sams, *Education,* Reading Acts: An Inquiry into Reading and Teaching. Professor Madeleine Grumet.

Magdalena Traico Sandor, *Physics and Astronomy,* NMR Study of Local Magnetism, Anelastic Deformation and Liquid Behavior of Bulk Metallic Glasses. Professor Yue Wu.

Ozge Savascin, *Economics,* Endogenously Clustered Factor Approach to Macroeconomics. Professor Neville R. Francis.

Ivana Semova, *Cell and Molecular Physiology,* The Role of Gut Microbiota and Diet in Lipid Metabolism. Professor John F. Rawls.

Sarah Shair-Rosenfield, *Political Science,* Electoral Reform, Party System Evolution and Democracy in Contemporary Indonesia. Professor Jonathan Hartlyn.

Dan Shen, *Statistics,* Sparse PCA Asymptotics and Analysis of Tree Data. Professors Steve Marron and Haipeng Shen.

Aram Shepherd, *English,* The Contours of America: Latin America and the Borders of Modernist Literature in the United States. Professor María DeGuzmán.

Jennifer Gentry Shields, *Environmental Sciences and Engineering,* Utilization of Microbial Source-Tracking Markers to Inform Targeted Remediation and Predict Potential Pathogens in High Priority Surface Waters. Professor Jill Stewart.

Cheryl Ann Smith-Miller, *Nursing,* Type 2 Diabetes Self-Management: Influences on Nutritional Practices and Physical Activity among Spanish-Speaking Limited-English Hispanics. Professor Diane C. Berry.

Jesica Speed, *Communication Studies,* Working Artists. Professors Madeleine R. Grumet and Steve K. May.

Karen Cruz Stapleton, *English,* Reading Food: Gender, Ethnicity and Transnational Identities in Latina Literature. Professor Maria DeGuzman.

Kimberly Michelle Steward, *Chemistry,* Strategies for the Synthesis and Use of β-Stereogenic α-Keto Esters. Professor Jeffrey S. Johnson.

Peter Benjamin Stranges, *Biochemistry and Biophysics,* Design of Protein-Protein Interactions Via β-Strand Pairing. Professor Brian Kuhlman.

Andrew Stuart, *Chemistry,* Optimization and Characterization of New Materials to Enhance Performance of Polymer Solar Cells. Professor Wei You.

Wei Sun, *Pharmaceutical Sciences,* Develop Small Molecule Regulators of GTPase-Activating Proteins of ADP-Ribosylation Factors (ARFGAPs). Professor Qisheng Zhang.

Elizabeth Thill, *Classics,* Cultural Constructions: Depictions of Architecture in Roman State Reliefs. Professor Monika Truemper.

Claudio Viotti, *Mathematics,* Analytical and Numerical Studies on Stratified Fluid Flows. Professors Roberto Camassa and Richard M. McLaughlin.

Catherine Joy Vladutiu, *Epidemiology,* Motor Vehicle Crashes and Adverse Maternal and Fetal Outcomes among Pregnant Drivers in North Carolina. Professor Charles Poole.

David Biaozhi Wei, *Pharmaceutical Sciences,* Economic Evaluation of Biological Therapy Use among Patients with Crohn's Disease. Professor Joel F. Farley.

Erich Alan Werner, *English,* Rants, Reactions and Other Rhetorics: Genres of the YouTube Vlog. Professor Jordynn Jack and Daniel Anderson.

Sarah Taves Whitley, *Neurobiology,* Investigating the Glial Contribution to Persistent Neuropathic Pain. Professor Ken McCarthy.

Elizabeth Marie Widen, *Nutrition,* Applying a Mother-Infant Dyad Perspective to Examine the Nutritional Interrelationships of HIV-Infected Malawian Mothers and Their Exclusively Breastfed Infants. Professor Linda Adair.

David C. Anderson Wiltshire, *Classics,* "Hopeful Joy": A Study of Laetus in Vergil's Aeneid. Professor James J. O'Hara.

Amy C. Wollish, *Microbiology and Immunology,* Contributions of the Host Immune Response to Control and Protection upon Infection with a Neurovirulent Alphavirus. Professor Mark T. Heise.

Jordan Womick, *Chemistry,* Nonlinear Optical Studies of Natural and Artificial Light Harvesting Antennae. Professor Andrew Moran.

Tong-Yng Wu, *Biomedical Engineering,* Novel Cheminformatics Methods for Modeling Biomolecular Data in High Dimension Low Sample Size (HDLSS) Chemistry Space. Professors David Lalush and Alexander Tropsha.

Hao Xu, *Computer Science,* How to Efficiently Implement an OSHL-Based Automatic Theorem Prover. Professor David Plaisted.

Jing Xu, *Chemistry,* Precisely Engineered Protein-Based PRINT® Particles for Delivery of Nucleic Acids. Professor Joseph M. DeSimone.

Weichen Xu, *Pharmaceutical Sciences,* Peptide-Based Biosensors and Light-Activatable Proteins: Tools for Studying Cell Signaling and Developing Cancer Diagnosis. Professor David Lawrence.

Liqiang Yang, *Materials Science,* Design Strategies for Polymer Solar Cells of High Efficiency and Low Cost: Materials, Interface and Device Structures. Professors Wei You and Edward Samulski.

Susan Elaine Young, *Nursing,* A Qualitative Analysis of Aftercare Service Provision for Survivors of Sex Trafficking in North Carolina. Professor Diane Kjervik.

DOCTOR OF PUBLIC HEALTH

Thomas Price Britton, *Health Policy and Management,* Mandated Treatment, 12-Step Support Groups, and Criminal Recidivism Policy Implications and Perspective. Professor Peggy Leatt.

Kristine E. Shields, *Health Policy and Management,* The Participation of Pregnant Women in Clinical Research: Implications for Practice within the U.S. Pharmaceutical Industry. Professors John E. Paul and Suzanne H. Hobbs.

The School of Education

ESTABLISHED 1885

Dean G. Williamson McDiarmid

DOCTOR OF EDUCATION

Sharon Bond, *Curriculum and Instruction,* Secondary Science and Mathematics Teachers' Perceptions of Support and Induction. Professor Rita O'Sullivan.

John Wheeler, *Educational Leadership,* N.C. Superintendent Turnover. Professor Fenwick English.

ACADEMIC DRESS

The following information, based in part on An Academic Costume Code and Ceremony Guide (published by the American Council on Education), may be helpful in identifying academic attire worn during UNC's Commencement exercises.

DEGREE CANDIDATES' REGALIA. The University's bachelor's gown was redesigned last year by award-winning colorist and fashion designer Alexander Julian — a Chapel Hill native and UNC alumnus — to be both Carolina blue and truly green, as in sustainably made. The fabric for the new True Blue gown is made from 100 percent post-consumer recycled plastic bottles (23 bottles for each gown) and is manufactured at mills in the Carolinas. The information about the gown's sustainability is suitably printed directly on the cloth, without the use of an extra label. In addition to being dyed a custom Carolina blue color, the True Blue gowns also have a more streamlined fit, white piping along the yoke and two white panels in front. The new tassels are blue and white, topped with a silver-colored Old Well medallion. An optional accessory is an embroidered white stole that the graduate may give to a parent in gratitude after the Commencement ceremony.

The untrimmed, black master's gown has a hood and an oblong sleeve, open at the wrist, that hangs nearly to the ground; the back part of its oblong shape is square cut and the arc in the front is cut away. The hooded doctoral gown features three bars across each sleeve. In 1999, the Faculty Council authorized a special doctoral gown for Carolina graduates. It is Carolina blue, with facings and crossbars of dark blue outlined in white piping. The facings bear the shield of the University supported by the torches of learning.

The hoods of master's and doctoral degree candidates vary in color according to the field of study (see list below).

FACULTY REGALIA. Faculty wear the regalia of the institution that conferred their highest degree. The doctoral gowns are usually faced with black velvet, although the color of the velvet may vary according to the field of study. Hoods, which differ in length according to the level of the degree held, are lined with official colors of the university or college that conferred the degree, usually with one color forming a chevron pattern over the other. Some colors you will see on faculty and administrators' robes are, for example, the crimson of Harvard, the maroon of Chicago, the orange and black of Princeton, the dark blue of Yale, and the light blue and white of North Carolina.

Like the hoods of master's and doctoral degree candidates, faculty hoods are edged and bound with velvet in the color appropriate to the field of study. The colors in the hoods and gowns of faculty and administrators represent the following fields in which degrees were taken:

APRICOT: Nursing
BROWN: Fine Arts
CITRON: Social Work
CRIMSON: Journalism
DARK BLUE: Philosophy
GOLDEN YELLOW: Science
GREEN: Medicine
LEMON YELLOW: Library Science
LIGHT BLUE: Education
LILAC: Dentistry
OLIVE GREEN: Pharmacy
ORANGE: Engineering
PEACOCK BLUE: Public Administration
PINK: Music
PURPLE: Law
SAGE GREEN: Physical Education
SALMON PINK: Public Health
SCARLET: Theology
YELLOW BROWN: Commerce, Business, Accountancy
WHITE: Arts, Letters, Humanities

POSTBACCALAUREATE PROFESSIONAL DEGREES, GRADUATE DEGREES *and* PROFESSIONAL GRADUATE DEGREES

August 2012

The School of Dentistry

ESTABLISHED 1949
Dean Jane A. Weintraub

DOCTOR OF DENTAL SURGERY
Kristin Miyoko Madden

The Eshelman School of Pharmacy

ESTABLISHED 1897
Dean Robert A. Blouin

DOCTOR OF PHARMACY
Matthew Thomas Starr

The Graduate School

ESTABLISHED 1903
Dean Steven W. Matson

MASTER OF ARTS

Art History
Ryan Patrick Johnson

Education
Aubrey Noel Comperatore
Elizabeth Lynn Greive
Melody Kung
Samathryn Emmanuelle Witham

Exercise and Sport Science
Deanna L. Babcock
Stephanie Allene Bomberger
Robert Jeffrey Bonser
Emily Gibb
Christine May Gilsdorf
Joseph Marc Ingriselli
Kristen Jordanna Koltun
Cecily Marie Lehman
John Patrick Marsh
Charlotte Allen Shatten
Bonnie J. Virag

Folklore
Sara Camp Arnold
Joseph Edward DeCosimo
Marwa Yusuf Koheji
Thomas Craig Owens

Geography
Priscilla Pinto Ferreira Vaz

Linguistics
Jeffrey Kline Gilbert
Emily Moeng

Mass Communication
Megan Elizabeth Camm
Joshua Michael Davis
Tiffany P. Devereux
Theresa A. Flagg
Kelly A. Izlar
Amy Mimi Schiffman
Andrew Royce Westney

Musicology
Molly Leeanna Barnes
Christa Anne Bentley
Aaron Gabriel Rapaport

Political Science
John Granville Cluverius
Robert Anthony Galantucci
Fraser Holmes
John Peter Lappie
Monica Leigh Moore
Mark Yacoub

Psychology
Prerna Bholah
Lisa May Brownstone
Danielle Dean
Melanie Sandy Fischer
Richard Shane Hutton
Daniel B. Lee
Milton Eugene Picklesimer

Religious Studies
Shannon Lorraine Harvey

Romance Languages and Literatures
Julie M. Warner

Sociology
Risa Jean Griffin
Shradha Shrestha

MASTER OF CITY AND REGIONAL PLANNING
Chrishaun Scott Smith
Christopher Wells

MASTER OF SCIENCE

Biomedical Engineering
Benjamin V. Keller
Alexander Timothy Mastro

Biostatistics
Jasperlynn Esther Kao
Kaitlyn Connelly McConville
Kristen Leigh Much
Hongsuk Song
Donna Jean Wilson

Chemistry
Laura Anne Benton
Joseph Lynn Emfinger
Kyle William Olson
Katherine Ann Schmidtke

Computer Science
Anna Dmitriyevna Derbakova
Nicolai Dragan
Rukun Fan
Yang Huang
Shih-Ling Keng
Yinpeng Li
Lei Pan
Yusuf Ali Simonson
Theo Christopher Walker

Ecology
Nicholas Stephen Adams
Naomi B. Schwartz

Economics
Derya Koleoglu

Environmental Sciences and Engineering
Kristen Alexandra Bretz
Lani Michelle Clough
Ryan Bradley Gustafson
Gabriel Edward McGowan
Maya Lakshmi Nadimpalli
Stephen Bradley Teet

Geological Sciences
Colleen McCormick Long
Joshua M. Rosera
Caitlin Renee Rushlow
Jonathon Syrek
Ian Zacharia Winkelstern
Yue Zhang

Materials Science
Zhigang Zhong

Neurobiology
Megan Beckel Kratz

Nutrition
Drew Coleman Millette

Occupational Therapy
Joy Lynn Agner
Katherine Celeste Brewer
Elizabeth Elaine Buse
Amanda Lee Carroll
Hillary Lyn Colter
Michelle Traci Hiatt
Amanda Kay Johnston
Catherine Kane Kaminski

Emily Kathryn Lewis
Nathan Emmanuel MacCosbe
Kendra Sarafina Manhertz
Bridgette Nicole McDougal
Caroline Frances McGhee
Elizabeth R. Merrill
Chelsea Rebecca Nycum
Spencer Edward Perraut
Caroline Maria Pinkston
Sasha Anne Valdez
Elise Bullard Wright

Operative Dentistry
Roopwant Kaur

Oral and Maxillofacial Radiology
Martin E. Evers

Pharmaceutical Sciences
Jacob W. Holler

Pharmacology
Jasmyn Dardy
Brent Douglas Hehl

Physics
Amy Colon

Prosthodontics
Theresa C. Wang

Rehabilitation Counseling and Psychology
Sarah Hahn Archer
Leah Cox
Maria Luz De La Serna Buzon
Rachel Marie Espey
Gina Jessamyn Johnson
Caley Martin Kropp
Sena M. Moran
Kelly Marie Nelson
Laurel Marie Powell
Shahin Dadfar Sabouri
Karie Ann Strader
Amanda Leigh Beaty Tewell
Brooke Michelle Vincent
Caroline Williams

Statistics and Operations Research
Sandeep Sarangi
Ying Song
Tan Xu

The Kenan-Flagler Business School

ESTABLISHED 1919
Dean James W. Dean Jr.

MASTER OF BUSINESS ADMINISTRATION
Evariyel Alegria
John Andrew Balog
Ryan Scott Barry
Juan Carlos Bonell
Douglas B. Carney
John Robert Davis
Alan Neil Golding
Brian Thomas Goral
Rajkumar Viswadoss Iyer
Matthew T. Jones
Eli Pasag Joseph
Sachin Mahajan
William Patrick Metzler
Thomas Joseph Miller
Robin Kathleen Watson Moser
John Patrick Neal
James Michael O'Brien
Manan C. Patel
Aaron Ricker
Easwaran Subramaniam
Kayte Jean Taylor
Sridhar Vaka
Kevin Michael Walsh
Douglas B. Warner
Ryan August Wiese

The School of Education

ESTABLISHED 1885
Dean G. Williamson McDiarmid

MASTER OF EDUCATION
Patricia Albornoz
Kristi Lynn Angstadt
Dawn Marie Baldwin
Michael Anthony Barbaza
Geoffrey Thomas Berry
Rebecca Croteau Black
Kristina Smith Brock
Jessica Elaine Browne
Amber Lynn Buck
Junica Shanee Chavis
Jenna Rae Clark
Melanie Patricia Crawley
Raelene Miller Daley
Melissa Marie Davenport
Keya Shanae Dunn
Danielle Elizabeth Faerber
Krystal L. Forte'
Lauryn Elissa Francis
Mary Margaret Kane Frommer
Sara Rathman Fuller
Susan Elizabeth Gragg
Caroline Elise Guthrie
Jessica Harrington
Cierra Marie Hill
Ann N. Hovis
Rachel R. Huber
Candace C. Jennette
Kelly Reese Jones
Karen Marie Kaczman
Marissa Lynn Kelly
Stacy Elaine Kennedy
Jennifer Ellen Kolb
Linda Waters Long
Robert McAuliffe
Nancy Jane McCracken
Joan Frances Mills
Amy Elizabeth Moffet
Kelly Ann Murphy
Miriam Palma
Susan Pape
Elizabeth Ashley Price
Michelle Reichel
Amy Melaine Brown Rickard
Emily Elise Rinkoski
Christina Denise Robinson
Casandra Bullard Seed
Adelaide Elizabeth Snedden
Morgan Taylor Snyder
Alexander Thomas Soper
Ashley Danielle Stover
Lara Nally Streby
Donna Wilkins Thompson
Allison Bryant Thorb
Elaina Toman
Ashley Elizabeth Tyndall
Donna L. Uhlich
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Kellye Anne Walton
Anna Blake Watkins
Rolie Adrienne Webb
Iyenda Zakia White
Brian Franklin Woodard
Esther Wu
Bryan Michael Zelski

MASTER OF ARTS IN TEACHING
Kelsie Mariam Adloo
Andrea M. Alvino
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Kelly Robert Barley
Andrew Hunter Barrett
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Marianne Na-Lee Cheng
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Leah Elizabeth Godfrey
Andreya S. Gomez
Meagan Leigh Hendricks
Catherine Leigh Hickey
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Paul Michael Ingram
So Lim Kim
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Sara Elizabeth Klein
Julie Ann Krenzer-Frybarger
Ting Yuk Lam
Elizabeth Dohyun Lee
Rachel Marissa Lithman
Willem M. Lutter
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The School of Information and Library Science

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MASTER OF SCIENCE IN INFORMATION SCIENCE
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Paula Rosalie Rigoli

Beata Halina Rosson
Lee E. Shaw
Caren Melanie Weiner Campbell

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Sofia Becerra-Licha
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William David Cook
Susan Margaret Craft
Matthew Thomas Dailey
Douglas S. Diesenhaus
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Matisha Hayden Wiggs
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Michael Steven Essa II
April Marian Fay
Christina Yvonne Gray
Aisha Jacasta Jones
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Alicia Lauren Kinsey
Jesse Lin Kowalski
Amanda Elizabeth Martin
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Jennifer Schultz Mickey
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Derrick Ross O'Neal
Olanike O. Oladele
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Samantha Marie Price
Kyle Koelle Rascoe
Amanda Elizabeth Reed
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Ashley Christine Tortorici
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The Gillings School of Global Public Health

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Manas Ranjan Sarangi
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Khanh Nhat Tran Viet
Christopher Brian Wiggs
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MASTER OF PUBLIC HEALTH
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Ian Matthew Allen
Diana Allotey
Simon Benjamin Ascher
Alexander Arkin Berger
Rachel Elizabeth Bland
Rachel C. Blasiak
Jillian Ellen Brown
Lisa Martin Carroll
Jeroen Filip De Man
Julie Ann Decoster
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Laura Corbin Downey
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Meredith Ashley Gilliam
Catherine Marie Green
Yvonne Greene
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Michelle McCrain Kiser
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Travis Conrad Book
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Grant Cargile Ligon
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Van Thi Ha Nghiem
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Emilia Ball Diamant
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August 2012

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Sabrina Rohanie Officer
Jonathan David Sanchez Jr.
Elizabeth Wangu*

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Marcus Jahmel Thomas
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Brent Vassar Williams
Matthew Charles Zachary

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Joseph Francis Woodruff*

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Jonathan Samuel Holston
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Justin Chandler Wilcox

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Charlene Joy Ruiz
Jennifer Anne Smith
Andrew John Waszkowski

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Hunter Bryan Hagy
Heather Rochelle Hyde
Joseph Figueroa McConnell
Alia Kathryn Olson

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Johnny O'Brian Ashe
Cecelia Anne Crenshaw
Austin Lamar Davis
Nisel Nitinchandra Desai
Ashleigh Nicole Dixon
Thomas Anthony Ferguson
Ian Drake Fryar
Justin Michael Halstead
Blaise Andrew Haubert
Jeffrey Jamal Hawkins
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Scott Joseph Houston
Ebony Ruth Keitt
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James Allen Messer
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Alexander Padraic Pellas
Roberto Beaumont Rosario
Garrett Evan Skillestad
John Kenneth Strayhorn*
Lauren Alena Temoche
Sean Christopher Zmijewski

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Charles Everett Bartel
Matthew Aaron Mowrer
Mary Michelle Newman
Douglas Franklin Perry
Kendra Anne Schaaf

Geological Sciences
Thomas Edwin Chapman
Patrick Evan Donnelly
Mark Crosbie Hamblin Jr.
Jing Niu+

Germanic and Slavic Languages and Literatures
Mckenzie Campbell Noblitt*

Global Studies
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Kathryn Nicole Charles
Hunter David Cwalinski
Erica Leigh Detrick*
Jordan Nicole Fletcher*
Allison Alden Gaby
Heather Hileen Hickox
Rebecca Ashley Hundley
Brittany Lauren Johnson
Hou Weng Lei
Allison Leigh McNeill
Abby Elise Moore
Jacob Shaun Riske
Janine Kaye Rose
Arielle Roberta Wright
Denis Yip
Aini Zhou

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Phillip Russel Benson
Thomas Lee Blaine
Kimberly Rebecca Boyd**
John William Claytor
Robert F. Corriher
Molly Hope Cunningham+
Daryl Albert Emig
Erin Alice Farley
Mark Crosbie Hamblin Jr.
Larry Michael Koonce
Matthew Aaron Mowrer
Kevin Charles O'Connell
Rachel Lee Parks
Jared Keith Simmons
Dain Holden Simpson
Devin Alexander Sloan
Philip Michael Stacks
Kenan Lewis Stewart
Donald Burgess Tilley Jr.
Richard Michael Watt
Stephen Benjamin Wiley
Joshua Austin Young

Latin American Studies
Colton Stiles Foster
Alexandra Yanacek Lowrie

Linguistics
Marguerite Renee Cameron
Colleen Mead
Reed Timothy Weatherill*

UNIVERSITY COLORS

As symbols of unity among Carolina students, alumni and fans, the school colors of light blue and white were first used around 1800 to distinguish between members of the Dialectic and Philanthropic Literary Societies. Throughout the 19th century, students were required to be members of either the Di or the Phi. The Di's color was light blue, and the Phi's was white. At University commencements, balls and other social events, the student officials, managers and marshals wore the color of their society, blue or white. Because the chief marshal or chief ball manager represented the whole student body, not just his society, he wore both colors. When the University fielded its first intercollegiate athletic teams in 1888, the question of what colors to wear had already been answered. Light blue and white had come to symbolize membership in the University, not in a single society.

Management and Society
Vanessa Badillo
Gregory Ryan Becker
Elizabeth Rose Bronson
Robert Blair Hunter
Courtney Yvette Laster
Katherine Elizabeth Rennie
Lauren Ellis Sale
Dean Jacob Segal

Mathematics
Brittany Kennedy Giacco
James Matthew Kelly
Suhyun Kim
Yong Lu*
Ashley Jade Mui*

Peace, War and Defense
John William Claytor
Meghan Leigh Hathcock
Benjamin Scott Kemp
Kyle Stewart Rehder
Jared Keith Simmons
Zachary Benjamin Toal
Aini Zhou

Philosophy
Hanna Jane Bustillo
Jordan Nicholas Council
Amanda Renee Ellis
Stuart Nicole Koury
John James Palumbo
Elisabeta Pindic*
Dain Holden Simpson
Joshua Derek Watkins

Political Science
Madelyn Sloan Barnhill
Edward Austin Brown
Hanna Jane Bustillo
Shawntiel Christine Ditchman
Joseph Keith Estes
Joshua Manuel Gonzalez
Heather Hileen Hickox
William Thomas Hopkins
Tega Charles Jessa
Shannon Celeste Kerr
Christopher Brent Lane
Alexandra Yanacek Lowrie
Jeremy Tyler Martin
James John McLaughlin
Michael Ryan McWaters*
Wesley Shamah Moss
Katherine Elizabeth Rennie
Jonathan David Sanchez Jr.
Morgan Yvette Sills
Whitney Aleece Smith
Sapna Ann Varkey
Justin Chandler Wilcox
Daniel James Woods

Psychology
Stedman Martin Ashley
Ashley Marissa Boraski

* *Indicates degree with distinction based on grade point average.*

** *Indicates degree with highest distinction based on grade point average.*

\+ *Indicates Honors recipients.*

++ *Indicates Highest Honors recipients.*

Erica Kristine Britton
Allison Clair Brown
Kelly O'Keith Chesson
Carrie Mercedith Cooper
Shakota Lashe' Davis
Janelle Renee Ewing
Nicholas Doyle Freeman
Yolanda Michelle Gardner
Treka Lededra Gibbs
Michael David Goodling
David Lee Griffin
Marisa Josefina Guijarro
Robert Blair Hunter
Lauren Gabrielle Iannotte
Ayana Yakima Johnson
Kerry Corvey Kelso
Frenshell Latrice Kizzee
Chelsea Byrd Lang*
Selitta Sharnise Legrand
William Hardison McGoogan
Derek Tyler Murray
Brigid Elizabeth Oldmixon
Ashley Denny Parr
Jenna Anne Petrie
Alexander Bashy Rafiee
Nestor Alexis Ramirez
Mallory Ann Roseman
Hyun Soo Seo
Briana Nicole Shambley
Morgan Helene Sparrow
Rachel Jessica Steiner
Amanda Catherine Stewart
Angela Strickland
Isaac Meade Uhlenberg
Ashley Ann Verplank*
Gavin Pauley Walker
Rebecca Leigh Webster
Benjamin Brummitt Ziccardi

Public Policy
Nisel Nitinchandra Desai
Vanessa Brianne Garber
Taylor Artist Jackson
Larry Michael Koonce
Ashton Dominic Murray
Sapna Ann Varkey

Religious Studies
Amanda Renee Ellis
Phillip David Hamilton
Alex Michael Pyun
Joshua Derek Watkins

Romance Languages
Joseph Keith Estes
Erin Alice Farley
Meleah Kathryn Faucette
Colton Stiles Foster
Gali Bettie Hashmonay*
Sean Ryan Hickey
Annika Krystyna Hugosson
Lauren Gabrielle Iannotte
Chelsea Byrd Lang*
Brittany Denece Long
Michael Ryan McWaters*
John James Palumbo
Angelica Roman
Jonathan Brooks Slaughter*
Lauren Alena Temoche

Sociology
Lakesha Mae Beasley
Lamarr Pearson Davis
Emily Hayworth Eades
Brittany Lashae Glover
Eugenia Drewry Gores*
Brittany Denece Long
Jonathan Clifton Outlaw
Rachel Lee Parks
Diemmi Thi Pham
Ashley Michelle Stadler
Raven Celeste Tate

Kelly Amber Wice

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Kerry Corvey Kelso
Amanda Grace Newton*++

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Jordana Laine Pfeifer*

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Aaron Paul Robinson*

BACHELOR OF SCIENCE

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Jeffrey Kyle Sechrist
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Brent Robert Smith
Kyle Justin Smith
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Emily Nicole Cooper

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Michael Anthony Esposito
Ashley Jade Mui*
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Austin Reed Conklin
Rebekah Leigh Rhodes
Kelsey Lowe Rogers

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Yaxiong Du
Blaise Andrew Haubert
Yong Lu*

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Jacob Christopher Ulirsch

Psychology
Richard Kenneth Baily
Daniel Francis Ferguson
Roberto Beaumont Rosario
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Rachel Ann Shepard
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Kristina Lin Voong
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Christopher David Sparks
Jaclyn Austin Wright**

The School of Dentistry
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KwangMee NuDelman*

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Rachel Kathleen Patty
Hanna Katherine Root*
Elaine Marie Townsend
Elizabeth Lee Wright

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Benito Luciano III
Jarett Anthony Roman
Phillip Richmond Transou

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Kathryn Nicole Charles
Christina Noel Cleveland
Brandon Jeffrey Curry
Hannah Martha Davis
William Randolph Futrell III
Andrew Brian Gaither*
Mark Robert Griffin
Lauren Marie Hafezi
Hanna Ji
Christopher Brent Lane
Ross Patrick Maloney*
Kelvin Moises Martinez
Caitlin Grace McGinnis
Lauren Elizabeth Miller
Abby Elise Moore
Elizabeth Mott
Timothy Benjamin Patron
Rachel Anne Pollard
Erin Sagen
Elizabeth Wangu*
Mary Katharine Withers
Victoria Dianne Yu

The School of Medicine
ESTABLISHED 1879
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BACHELOR OF SCIENCE IN RADIOLOGIC SCIENCE
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The School of Nursing
ESTABLISHED 1950
Dean Kristen M. Swanson

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Kendra G. Black
Meredith Coren Cole
Angie Farmer Hounsell
Ketan B. Ramji
Tasha Renea Salazar
Scott Edward Taylor*
Sonya Burns Ware
William Henry Wendt

The Gillings School of Global Public Health
ESTABLISHED 1939
Dean Barbara K. Rimer

BACHELOR OF SCIENCE IN PUBLIC HEALTH
Molly Katherine Gehring

* *Indicates degree with distinction based on grade point average.*

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THE UNIVERSITY SEAL

The University seal typically appears on diplomas and graduation materials, grade transcripts and documents that indicate accomplishment in or on behalf of the University. The first seal of the University of North Carolina, designed in 1790, showed the face of Apollo and his emblem, the rising sun, used to symbolize the dawn of higher education in the state. The words "sigul universitat carol septent" (Seal of the University of North Carolina) surrounded the drawing. A modification in 1895 added lighted torches of learning beside Apollo's profile. Two years later another alteration replaced Apollo's head with a shield on which the words Lux (light) and Libertas (liberty), separated by a white band running from the upper right to the lower left of the shield, appeared. In the 1940s, some observers mistakenly claimed the white stripe on the shield was a bend sinister, a heraldic code that was demeaning. In truth, the stripe was a bar sinister and merely denoted a second or later son. Still, the direction of the stripe was reversed, removing any question of stigma. Today's seal is the same as the 1897 version, except the stripe runs from the upper left to the lower right.

CERTIFICATES

August 2012

Undergraduate Certificates

The Gillings School of Global Public Health

ESTABLISHED 1939
Dean Barbara K. Rimer

CERTIFICATE IN COMMUNITY PREPAREDNESS AND DISASTER MANAGEMENT
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Jacazza L. Jones
Stephen Walter McKaig
Samantha Marie Migit
Alexandra Schaefer
Chadwick Adams Slaughter
Brian Scott Thomas
Stacey Diane Wiles

Postbaccalaureate Certificates

The Gillings School of Global Public Health

ESTABLISHED 1939
Dean Barbara K. Rimer

CERTIFICATE IN CORE PUBLIC HEALTH CONCEPTS
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Hongmei Gao
Kelli Morris Greene
Lindsay P. Prizer
Banalata Sen
Jonathan E. Stanford
John McKenzie Stogner
Christopher Gerard Van Hasselt
Sherrie Rackley Webb

CERTIFICATE IN FIELD EPIDEMIOLOGY
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Rebecca Horne
Molly Price Jarman
Jessica Maralyn Ruble
Priyadarshani Sokkalingam
Chrysa McDuffie Zachary

CERTIFICATE IN GLOBAL HEALTH
Natalie Whisenant Conner
Rebecca Ullman

CERTIFICATE IN MATERNAL AND CHILD HEALTH LEADERSHIP
Andrea Michelle Hernandez
Shaneka Thurman
Jessie Viders

CERTIFICATE IN OCCUPATIONAL HEALTH NURSING SPECIALTY
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Bridget Baucom
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